

**ANNUAL REPORT FOR 1971** 

















FOR 1971, AMAX earned \$55,410,000 before extraordinary charges of \$3,810,000. Although the results were down from the record years of 1969 and 1970, the above graph indicates that despite short-range fluctuations in earnings—characteristic of the metals business—the long-term trend has been upward.

Estimates of worldwide mineral requirements over the coming decades indicate unprecedented demand, and AMAX has progressively diversified its activities into a broad spectrum of minerals and metals.

Reserves in the ground and a reservoir of people at AMAX with the necessary expertise will benefit shareholders, customers, employees, and the communities where AMAX has operations.

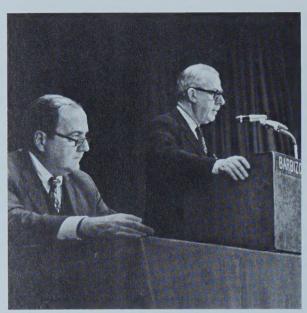


# **Financial Highlights**

TABLE OF CONTENTS	For the Year	1971	1970
Financial Highlights 1 Report to Shareholders 2	Net sales.	\$756,920,000	\$840,720,000
Board of Directors and AMAX Corporate Officers 4	Income before taxes From operations	59,470,000	78,980,000
AMAX Molybdenum and Specialty Metals Group 5	From dividends	5,500,000	22,550,000
AMAX Fuels and Chemicals Group 9	Interest expense, net  Earnings of RST International, Inc. after taxes	(11,930,000) 12,810,000	(7,570,000) 11,550,000
AMAX Overseas Mining Activities Group 13	Earnings of NST International, Inc. after taxes  Earnings before extraordinary charges	55,410,000	83,600,000
AMAX Exploration and Environment 15	Net earnings	51,600,000	83,600,000
AMAX Aluminum Group 17	Per common share		
AMAX Base Metals Group 21	Primary:		
RST International, Inc. 25	Before extraordinary charges	\$2.20	\$3.40
Botswana RST Limited 28 Financial Review 29	After extraordinary charges	\$2.04	\$3.40
Consolidated Statement	Fully diluted (after extraordinary charges)	\$2.01	\$3.26
of Current and Retained Earnings <b>33</b>	Dividends declared	36,530,000	36,280,000
Consolidated Statement of Financial Position 34	Per common share	\$1.40	\$1.40
Consolidated Statement of Changes in Financial Position 35	Capital expenditures	139,450,000	110,200,000
Notes to Financial Statements 36			
Opinion of Independent Accountants 39	At Year-End		
Ten-Year Summary 40	Working capital	\$302,430,000	\$233,030,000
General Counsel Sullivan & Cromwell	Total assets	1,253,250,000	1,066,770,000
Certified Public Accountants	Long-term debt	392,040,000	261,490,000
Lybrand, Ross Bros. & Montgomery	Shareholders' equity	\$625,160,000	\$609,750,000
Transfer Agent Manufacturers Hanover Trust Company	Common shares outstanding	23,680,285	23,668,508
Registrar	Number of shareholders	31,449	32,216
Irving Trust Company	Preferred shares outstanding	786,868	786,868
The 1972 Annual Meeting of Shareholders of American Metal Climax, Inc. will	Number of shareholders	922	724
be held May 4, 1972 in the theater of the Barbizon-Plaza Hotel, 101 West 58th Street, New York City, at 2:15 P.M. A formal notice of the meeting, together with a proxy statement and form of proxy,	Number of employees	16,700	17,000

with a proxy statement and form of proxy, will be mailed to each AMAX shareholder during the first part of April, at which time management will request proxies.

# **Report to Shareholders**



Donald J. Donahue, President / Ian MacGregor, Chairman

AMAX had sales of \$756.9 million and earnings of \$55.4 million before extraordinary charges, or \$2.20 per common share in 1971. Reduced demand, higher costs, and labor interruptions eroded profit margins. However, profits of two of our businesses—coal and iron ore—partially offset the reduced profitability of other metals operations.

Despite strong recessionary influences on the raw materials industries, AMAX operating earnings suffered less than earnings from dividends and other sources after deducting interest expense. Operating earnings, after taxes, were off 21% in 1971, while dividend and other earnings, which included RST International, were down 61%. (Dividend earnings in 1970 were unusually large as a result of final distributions from Roan Selection Trust Limited.)

Reports from housing, automotive, retailing, and other industrial groups showed signs of recovery in the fourth quarter, and the momentum generated could affect favorably the more sluggish sectors of the economy.

Recovery continued into the first quarter of 1972, but may not affect the natural resources and metals industry until later in the year. Improvements in foreign metal markets may be even further delayed.

# **Factors Affecting 1971 Performance**

In 1971, molybdenum, nickel, tungsten, copper, and aluminum all suffered from oversupply and price weakness, and no dramatic turnaround is in immediate prospect. Strikes affected our coal production in the fourth quarter and, to a lesser extent, our results in copper. If the economy moves forward as expected, we should see improved results from most metals later in 1972. Coal should continue its strong performance, while iron ore sales will be somewhat affected by the slowdown in the Japanese economy.

We may see less dramatic increases in annual metals demand from Japan in the next few years, but there is hope that the growth of metals requirements will accelerate in other industrial countries, including the United States.

Despite the soft markets for metals generally at year-end, we continue to have long-term confidence in improved future demand. Metals such as copper tend to follow cyclical demand patterns, and

long-term projections of demand, based on anticipated growth of world population and increasing industrialization in the developing countries, indicate that known reserves of metals will be taxed to fulfill the requirements by the year 2000.

AMAX plans to continue to expand and diversify, subject to the availability of capital, the state of the market, and the political climate of potential developing areas.

# **Productivity and Trade**

U.S. trade problems will not be solved by erecting walls of protectionism, but in generating a desire for excellence and productivity that will put American products back into competition because of prices and value. Labor, management, and government working together must restore American competitiveness.

# **Social Responsibility**

The business community is under many pressures today, and some of these pressures make it more difficult for the United States to compete in world markets. The industrial and business community, and we at AMAX, acknowledge our concern for the environmental problems that seem to be among the most worrisome social issues today.

No man or any single group is responsible for today's environmental degradation. All have contributed—from the time of man's first attempts to provide for his needs. The changes in our environment brought about by burgeoning population and industrialization properly cause us concern.

Environmental problems will not be solved by bitter confrontations between elements that make up society. The technology that has already contributed so much to human benefit can and must be mobilized to solve environmental problems.

AMAX has been and will continue to be in the forefront of efforts to reconcile industrial activities with environmental needs. Elsewhere in the Report is a special section on AMAX's environmental activities, together with descriptions of specific accomplishments in the sections on Group activities.

# **Nickel-Copper Project in Botswana**

After more than three years of complex negotiations, the arrangements for financing the Selebi-Pikwe

nickel-copper project in Botswana and its related infrastructure have been completed. It is anticipated that production at Pikwe will commence in early 1974. We are pleased that Anglo American Corporation of South Africa Limited and associated companies have joined AMAX in sharing on an equal basis the very substantial completion and payment guarantees and other obligations connected with this project, and in backing it with finance, management, and technical skills. We welcome the participation of the Botswana Government as a 15%-equity shareholder in BRST's subsidiary mining company in addition to its major involvement in providing electric power, water, township, and other infrastructure for the project.

# **RST and BRST Litigation**

An appeal from a U.S. District Court judgment in a suit by a dissident shareholder contesting the reorganization of RST is currently awaiting a decision by the Third Circuit Court of Appeals.

A section devoted to RST on pages 25 to 28 of the Report provides details.

As to the litigation relating to BRST, an answer has been filed in which the essential allegations of the complaint are denied.

Details are provided on page 28.

• •

Employee relations continued generally satisfactory, and the Company is grateful to its share-holders, customers, suppliers, and employees for their support and continued loyalty.

Chairman and Chief Executive Officer

President

March 15, 1972

# **Board of Directors**

# **Officers**

### **FOR THE TERM ENDING 1972**

John B. Aird (Toronto, Canada)
Partner, Edison, Aird & Berlis; and Senator of Canada

Donald J. Donahue President

Walter Hochschild Honorary Chairman of the Board and Chairman of the Executive Committee

John Payne, Jr. Vice President

Harold J. Szold Partner, Lehman Brothers and a Managing Director, Lehman Brothers Incorporated

Edward C. Wharton-Tigar (London, England)
Managing Director, Selection Trust Limited

### **FOR THE TERM ENDING 1973**

Thomas H. Bradford (London, England)
Director, Selection Trust Limited

William A. M. Burden
Partner, William A. M. Burden & Co.

Harold K. Hochschild Honorary Chairman of the Board and Chairman of the Compensation Committee

Carl M. Loeb, Jr.

President, National Council on
Crime and Delinquency

lan MacGregor
Chairman of the Board

John Towers
Vice President

# **FOR THE TERM ENDING 1974**

A. Chester Beatty (London, England)
Chairman, Selection Trust Limited and
Consolidated African Selection Trust Limited

Arthur H. Dean Partner, Sullivan & Cromwell, General Counsel of AMAX

John P. Du Cane (London, England) Director, Selection Trust Limited

Pierre Gousseland Vice President

Gabriel Hauge Chairman of the Board, Manufacturers Hanover Trust Company; Chairman of the Audit Committee of AMAX

Lawrence J. Plym

Gordon W. Reed Consultant to AMAX and Chairman of the Finance Committee

Ian MacGregor Chairman and Chief Executive Officer Donald J. Donahue President R. Bern Crowl Vice President Edwin J. Eisenach Vice President John F. Frawley Vice President Pierre Gousseland Vice President Charles B. Huizenga Vice President Robert Marcus Vice President David Mayers Vice President Edward S. Miller Vice President John Payne, Jr. Vice President H. A. Sawyer, Jr. Vice President and Treasurer Roger C. Sonnemann Vice President Fred H. Stewart Vice President John Towers Vice President Reuel E. Warriner Vice President Erwin A. Weil Vice President and Secretary Martin V. Alonzo Controller

# **EXECUTIVE COMMITTEE**

Walter Hochschild Chairman

Arthur H. Dean Donald J. Donahue John P. Du Cane Harold K. Hochschild Carl M. Loeb, Jr. Ian MacGregor Lawrence J. Plym Gordon W. Reed

Edward C. Wharton-Tigar

# FINANCE COMMITTEE

Gordon W. Reed Chairman

William A. M. Burden Arthur H. Dean Donald J. Donahue Gabriel Hauge Harold K. Hochschild Walter Hochschild
Ian MacGregor
Lawrence J. Plym
Harold J. Szold
Edward C. Wharton-Tigar

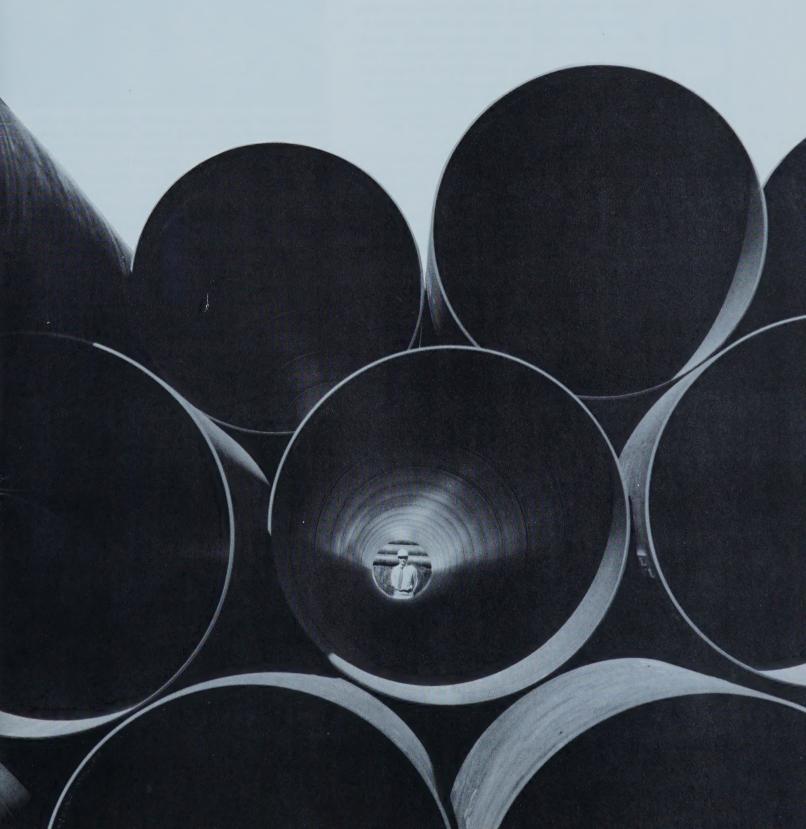
# ORGANIZATIONAL CHANGES

In November, 1971, Edwin J. Eisenach was elected Vice President of AMAX. He has been placed in charge of the Exploration & Mine Evaluation Division and also heads the companywide Environmental Planning and Protection Committee. Until his election, he was in charge of Western Operations of the Climax Molybdenum Company Division.

R. Bern Crowl, Vice President of the Company, relinquished the office of Treasurer upon being made Executive Vice President of the Company's subsidiary, AMAX Iron Ore Corporation. H. A. Sawyer, Jr., Vice President-Finance, assumed the additional office of Treasurer.

The Company reports with regret the death on September 26, 1971 of David D. Irwin, Director Emeritus, who was associated with AMAX for more than 40 years, including 25 years as a Director.

Research by Climax's Research and Development staff provides new uses for molybdenum in applications such as high-strength steel for fabricating pipe. Pipe on the order of the 42-inch diameter shown here will carry gas for new Trans-Canada pipeline.



# AMAX MOLYBDENUM AND SPECIALTY METALS

AMAX Molybdenum and Specialty Metals, which is responsible for the Company's interests in molybdenum, tungsten, nickel, hafnium, zirconium, and molybdenum metal, had sales of \$108 million in 1971, off some 26% from the near-record figures reported for 1970. This decline reflects the depressed state of the economy and the general downturn in the alloy steel and capital goods industries which consume most of the division's products. Higher operating costs in 1971 also reduced division earnings for the year.

Molybdenum: Free World molybdenum production was down slightly in 1971 because of cutbacks by producers. Looking ahead, the period of rapid expansion of capacity appears to be over, but several new Canadian mines are still expected to come on stream in 1972 and 1973. The production from these mines, however, should about equal that of the cutbacks announced last year.

Estimated consumption of molybdenum in the Free World fell from 135 million pounds in 1970 to 127 million pounds in 1971. The performance of the molybdenum market in 1971, however, was better than that achieved by some other alloying elements. Over the next decade, molybdenum consumption in non-Communist countries is expected to grow at an average rate of approximately 7.5% annually. Demand in the United States is expected to resume its normal growth pattern with improvement in the economy.

During 1971, Climax reduced mine output, but since sales declined to a greater extent than molybdenum output, molybdenum inventories were accumulated during the year.

Beginning in 1970 and continuing in 1971, molybdenum product prices reflected excess supply and the general economic weakness. Prices established for high-quality concentrates, as produced by AMAX, remained relatively stable. Molybdenum prices in general were weaker in 1971, and this price softness is expected to continue into 1972 and until such time as business expansion brings supply and demand into better balance.

In 1972, AMAX expects to benefit from new market applications for molybdenum that were introduced in the last three years:

In 1971, some 50,000 tons of a new highstrength steel containing 0.25% molybdenum were produced in five different countries for use in pipelines to carry natural gas and petro-



AMAX participates in symposiums promoting new uses of molybdenum such as the one it co-hosted in Kyoto, Japan in October, 1971 on the theme, "Toward Improved Ductility and Toughness."

leum. Future growth is foreseen for application in car bumpers that meet new governmental crash regulations, in heavy mobile equipment, and in railroad cars.

A new 18% chromium, 2% molybdenum steel is expected to increase molybdenum consumption in stainless steel substantially over the next decade. This steel will offer improved performance and economy to users needing corrosion-resistant steels for hot water heaters, heat exchangers, and other applications.

White Moly, a new non-toxic paint pigment which exhibits good corrosion inhibition, whiteness, and opacity is considered a likely replacement for toxic materials currently used in the paint industry. Paints containing White Moly are scheduled to be produced by a major paint manufacturer in 1972. White Moly provides protection from corrosion to steels used as structural members of bridges and buildings.

Western Operations: Development of the Henderson Project in Colorado continued in 1971, with preparation of the mill site, construction of the mill water reservoir, and buildup of dams for mill-tailing storage. In addition, the 9.3-mile-long rail haulage tunnel under the Rockies was started, and 12,000 feet of development openings were completed underground within the mine. The No. 2 shaft at Henderson is scheduled to be completed around mid-1972 and the entire project in the second half of the decade.

Comprehensive studies of the Climax orebody indicate that an additional 90 million tons of ore

averaging better than 0.21% molybdenum can be made available by low-cost, surface mining methods. Studies now are under way to determine how surface production can be integrated efficiently with the normal output from underground.

Conversion: Work is on schedule on the construction of Europe's largest ammonium molybdate facility in The Netherlands. Products from this facility will be available in 1972 for sale to the catalyst, chemical, and metallic molybdenum industries.

In the United Kingdom, the ferromolybdenum conversion plant operations of Minworth Metals Limited were consolidated into those at Stowmarket, streamlining production and reducing costs.

In Italy, the S.A.L.E.M. (Soc. p. Az. Leghe e Metalli) conversion plant near Genoa initiated ferrocolumbium production, in addition to its regular production of ferromolybdenum and other ferroalloys.

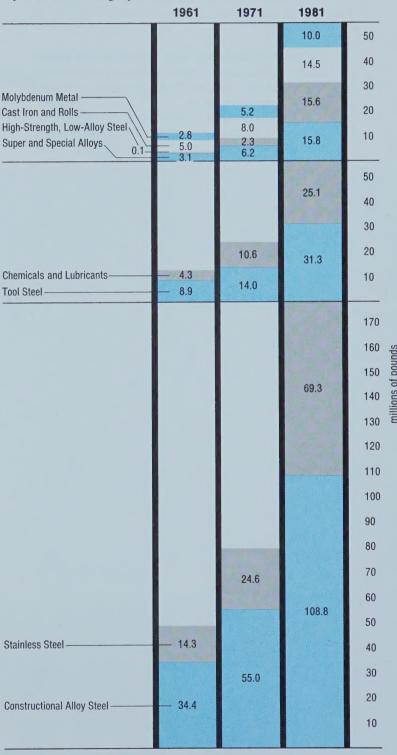
Site acquisition was approved in December, 1971 for the Nippon Moribuden K.K. molybdenum conversion plant in Japan. Construction should be completed in 1973. AMAX has a 34% equity in this project; the rest is held by Japanese companies.

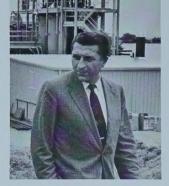
Tungsten: In 1971, tungsten sales decreased 16% from the record level set in 1970. Tungsten prices, which historically have varied cyclically over a wide range, were higher on average in 1971 than in 1970, but weakened sharply late in the year. The long-term outlook for tungsten anticipates a rate of consumption increase of between 5% and 6% per year, buoyed by a 10% yearly growth in sintered tungsten carbides. In the future, tungsten carbides will be introduced for non-cutting structural and wear-resistant parts.

Nickel: AMAX is moving ahead with previously announced plans to enter the nickel business through rehabilitation and expansion of AMAX's Port Nickel refinery at Braithwaite, Louisiana. The plant will toll-refine the nickel-copper matte to be produced in Botswana. (See page 28.) Work on the nickel refinery is scheduled for completion in 1974.

Penamax G.I.E., the AMAX nickel venture with Société Minière et Métallurgique de Peñarroya S.A. in New Caledonia, is being evaluated. At least 250 million metric tons of ore of average grade of 1.4% nickel have been defined. Preliminary results of ore tests concluded at the Penamax pilot plant

# **Estimated Free World Molybdenum Consumption** by Industrial Category





Pierre Gousseland, Group Executive

and at the AMAX extractive metallurgy laboratory in Golden, Colorado, as well as Peñarroya's research laboratory in France, are now being assessed.

# Hafnium, Zirconium, and Molybdenum Metal:

AMAX's Specialty Metals Division is responsible for producing and marketing zirconium, hafnium, and molybdenum metal.

The Company's Coldwater, Michigan fabrication facilities extended production to supply the power industry with molybdenum metal components for high-temperature, gas-cooled nuclear reactors. This plant also supplied refractory metal hardware made of molybdenum for use in sintering fuel pellets. Although consumption of molybdenum metal in mill products was about the same in 1971 as 1970, new applications now being investigated by the research staff are expected to expand consumption in future years.

The Parkersburg, West Virginia and Akron, New York plants enjoyed the highest zirconium and hafnium mill products sales in a decade. Increasing demand is attributed to commercial and United States Navy nuclear power programs and new product development programs in the domestic and foreign markets. New applications for hafnium in photographic flash cubes and as an alloying element in superalloys spurred sales. Consumption of zirconium is expected to increase in direct proportion to the start-up of new nuclear power plants.

In May, 1971, the Parkersburg zirconium sponge plant received an environmental excellence award from *The Environment Monthly* for its air pollution-control program.



Operations and Locations

# AMAX MOLYBDENUM AND SPECIALTY METALS GROUP

# CLIMAX MOLYBDENUM COMPANY DIVISION

Greenwich, Connecticut PIERRE GOUSSELAND President

# Western Operations

Golden, Colorado WILLIAM DISTLER Vice President

# Molybdenum Mining

Climax, Colorado Henderson, Colorado Urad, Colorado

# Conversion Operations and Technology

Greenwich, Connecticut HERBERT KAY Vice President

Langeloth, Pennsylvania Stowmarket, England Rotterdam, Holland Spigno, Monferrato, Italy

# Extractive Metallurgy Golden, Colorado

# Administration, Finance, and Legal

Greenwich, Connecticut DAVID L. FARLEY, JR. Vice President

# Sales, Market Development, and Research

Greenwich, Connecticut HARRY W. MEYER Executive Vice President

New York, Chicago, Dayton, Denver, Detroit, Los Angeles, Pittsburgh

# Sales

Greenwich, Connecticut
JOHN W. GOTH
Vice President

# Chemicals

Greenwich, Connecticut RICHARD E. ANDERSON Vice President

# Europe

Paris, France RICHARD H. THOMPSON Vice President

### Research and Market Development

Ann Arbor, Michigan HORACE N. LANDER Vice President

# **Technical Information**

New York, New York JANET Z. BRIGGS Vice President

# International Sales

Climax Molybdenum S.A. Paris, France

### Climax Molybdenum Company Limited London, England

Climax Molybdenum Company Zürich, Switzerland

Climax Molybdenum G.m.b.H. Düsseldorf, Germany

# Climax Molybdenum Development Company (Japan) Ltd.

Tokyo, Japan

### Minworth Metals, Limited Stowmarket, England

International Sales Service Representatives

Equipamentos Industrials EISA Ltda. São Paulo, Brazil

### Railway & Power Engineering Corporation Limited Montreal, Canada

Nichibei Boeki Company, Limited

Tokyo, Japan

# Samuel Osborn (South Africa) (Pty.) Limited Johannesburg, South Africa

Metal Distributors Limited

### Bombay, Calcutta, Madras, and New Delhi, India

# NICKEL PROJECT Greenwich, Connecticut REUEL E. WARRINER Vice President

# AMAX SPECIALTY METALS DIVISION

Greenwich, Connecticut
G. ROBERT COUCH
President

### Fabricating Plant Sales and Service Akron, New York

Zirconium Sponge Plant Parkersburg, West Virginia

# Metallic Molybdenum Production Coldwater, Michigan

Metallic Molybdenum Sales and Service Ann Arbor, Michigan

# Sales

Greenwich, Connecticut JOSEPH P. McGUIRE General Sales Manager The skyline of St. Louis is illuminated by coal-powered electrical energy. AMAX Coal's new Leahy Mine supplies coal for one of the major generating stations serving the St. Louis area.





AMAX Carbon Products officials compare new, formed coke (left) to be produced at new Bakersfield, California plant with the usual metallurgical coke.

# AMAX FUELS AND CHEMICALS GROUP

AMAX Fuels and Chemicals sales for 1971 were \$118 million, approximately the same as 1970, but earnings were up nearly 19% over 1970. Sales in 1971 were adversely affected by the six-week coal strike in the last quarter, and the suspension of mining operations by AMAX Uranium. Despite the downward drift of the general economy, sales of all other divisions increased in 1971.

Effective January 1, 1972, the business units of Fuels and Chemicals whose names did not already incorporate AMAX were changed to achieve closer identity with the parent Company. Only Meadowlark Farms retained its original name.

Coal: As a result of the mine workers' strike from October 1 through November 13, production by AMAX Coal Company, formerly Ayrshire Coal Company, dropped in 1971 to 12.5 million tons from the record 14.3 million tons in 1970. AMAX Coal operated 10 wholly owned mines and the 50%-owned Gibraltar Mine in 1971.

Despite heavy losses sustained during the strike period, earnings increased over 1970 on slightly lower sales volume because of strong market conditions and improved operations at a number of mines. The new Leahy surface mine in southwestern Illinois began shipments on November 26, 1971. Sales of 3 million tons a year from this mine are committed under long-term contract with Union Electric Company of St. Louis.

During 1971, construction was started on two additional surface mines — the Ayrshire Mine in southwestern Indiana and the Belle Ayr Mine in northeastern Wyoming—and one deep mine, the Wabash Mine in southeastern Illinois. A total of 8.5 million tons from three new mines has been committed to public utilities under long-term contracts. The Belle Ayr Mine marks the entry into mining of the Company's extensive reserves of low-sulfur western coal.

Capital expenditures for coal in 1971 amounted to \$29 million, and increased expenditures are planned for 1972 and 1973.

The Bureau of Mines estimates that U.S. energy demands will double in the next 15 years and that the demand for coal in this market will increase by more than 50% during this same period.

Technology for economic production of synthetic natural gas and oil from coal is progressing, and additional large quantities of coal may be required to serve this new potential market.

AMAX Coal has the necessary reserves (estimated at 4 billion tons as of December 31, 1971) and is making the required investments to participate in the growing coal market. Expansion of existing mines and new mines under construction will increase the Company's production capacity to approximately 25 million tons by 1975.

Carbon Products: AMAX Carbon Products, Inc., formerly Republic Carbon Products, increased sales and profits in 1971. The new 50%-owned plant in Pasadena, Texas, producing calcined petroleum coke, is largely responsible for record high sales. A wholly owned petroleum coke plant in Bakersfield, California will begin operations later this year and will supply foundries and metallurgical industries on the West Coast with a new, formed coke product.

Fly Ash: AMAX Fly Ash Corporation, formerly Dayton Fly Ash, markets fly ash, a waste product from burned coal collected by electric utility companies. Fly ash is sold to the construction industry for use in ready-mix concrete, thus completing the coal utilization cycle. Both sales and profits were up in

1971 and new plants in the Atlanta market will increase productive capacity in 1972.

Petroleum: AMAX Petroleum Corporation increased production, sales, and earnings in 1971 as the result of the acquisition of several oil- and gasproducing properties. Daily production averaged 1,750 barrels—up from 1,500 barrels in 1970. AMAX Petroleum plans to participate in the growing energy market through its oil and gas properties and continued exploration programs.

**Uranium:** AMAX Uranium Corporation, formerly Climax Uranium, discontinued milling operations at Grand Junction in 1970 because of declining ore reserves and markets. Mining operations were suspended in 1970, but exploration activities are continuing.

Potash: AMAX Chemical Corporation, formerly Southwest Potash Corporation, increased sales and earnings in 1971 despite the depressed conditions in the potassium nitrate business. AMAX purchased a portion of International Minerals and Chemical Corporation's potash reserves in Saskatchewan, Canada and entered into a service agreement for IMC to produce specified quantities of potash annually from these reserves. Demand and prices for muriate of potash were strong in 1971, and the market is expected to remain firm for 1972. Continued modernization at the Carlsbad Mine resulted in production efficiencies. Production was discontinued at the potassium nitrate plant in Vicksburg, Mississippi because of market resistance to this premium-priced agricultural-grade product.

Environmental Control: AMAX Fly Ash was singled out by *The Environment Monthly* magazine to receive one of the publication's annual awards for environmental excellence. This award was in recognition of the Corporation's success in turning fly

Above: Fertilizer manufacturer loads AMAX Chemical's High-K muriate of potash into a spreader for fall application.

Right: Fly ash collected from a new power plant in Atlanta is loaded for shipment to an AMAX customer.







Group Executive John F. Frawley (right) and AMAX Coal President Ralph Beerbower at Leahy preparation plant.

ash-an air pollutant captured from power plant smokestacks-into a profitable raw material used in the manufacture of cement. A pioneer in this activity, AMAX Fly Ash has a patented process for using fly ash in extinguishing underground fires in abandoned coal mines and has utilized the material in preventing ground subsidence in minedout areas.

AMAX Coal has been a leader in its efforts to rehabilitate disturbed land resulting from surface mining of coal. Historically, AMAX Coal each year strives to put back into agricultural and related uses as much acreage as it mines. Its Meadowlark Farms, Inc. farms AMAX Coal land before and after mining and makes a profit while fulfilling its environmental responsibility to rehabilitate the land.

During 1971, approximately one million bushels of grain were harvested by Meadowlark-almost twice the amount produced in 1970-along with 435,000 pounds of beef and 405,000 pounds of pork on the hoof.

Operations and Locations

# **AMAX FUELS AND CHEMICALS GROUP**

Greenwich Connecticut JOHN F. FRAWLEY Group Vice President

# AMAX COAL COMPANY

indianapolis, Indiana RALPH C. BEERBOWER President

# **Operating Mines**

Ayrcoe Mine, Oakland City, Indiana Ayrgem Mine, Central City, Kentucky Chinook Mine, Staunton, Indiana Delta Mine, Marion, Illinois Gibraltar Mine, Central City, Kentucky\* Leahy Mine, Campbell Hill, Illinois Minnehaha Mine, Sullivan, Indiana Sun Spot Mine, Vermont, Illinois Thunderbird Mine, Farmersburg, Indiana Wright Mine, Boonville, Indiana

# **Mines under Construction**

Ayrshire Mine, Chandler, Indiana Belle Ayr Mine, Gillette, Wyoming Wabash Mine, Mt. Carmel, Illinois

# Sales Office

Indianapolis, Indiana

# Services and Transportation

Algers, Winslow, and Western Railway Company, Oakland City, Indiana\* Yankeetown Dock Corporation, Yankeetown, Indiana \*\*

# Meadowlark Farms, Inc.

IRWIN H. REISS President Sullivan, Indiana

# AMAX CARBON PRODUCTS, INC.

Chicago, Illinois ARTHUR W. McCLAIN President

# Metallurgical Coke Plant

Bakersfield, California

# Sales and Service

Chicago, Illinois Houston, Texas Indianapolis, Indiana New York, New York Newport Beach, California

# AMAX Carbon Products of Canada, Ltd.

Toronto, Ontario, Canada

# International Calciners, Inc.\*

Pasadena, Texas

# AMAX CHEMICAL CORPORATION

Greenwich, Connecticut EVERETT C. HORNE President

# Sales and Service

Greenwich, Connecticut

# Potash Mining

Carlsbad, New Mexico

# AMAX Potash Limited

Esterhazy, Saskatchewan, Canada

# International Sales and Service

Latin America, Europe, Africa, Asia, and Oceania

# AMAX PETROLEUM CORPORATION

Englewood, Colorado LLOYD L. PARKS President

### AMAX Petroleum of Canada, Limited Calgary, Alberta, Canada

AMAX Petroleum (U.K.) Limited London, England

# AMAX Petroleum Norge A/S Oslo, Norway

# AMAX URANIUM CORPORATION

Englewood, Colorado LLOYD L. PARKS President

# AMAX FLY ASH CORPORATION

Dayton, Ohio BARTON A. THOMAS President

# Sales and Service

Atlanta, Georgia Dayton, Ohio Pittsburgh, Pennsylvania Terre Haute, Indiana Wilsonville, Alabama

<sup>\*50%-</sup>owned

Mt. Newman, a major iron ore producer in Western Australia, is equipped to supply high-grade iron ore to steel producers throughout the world. Huge reserves of top quality hematite ore, large-scale mining equipment (shown below), a high-volume railroad system, and a deep-water port for handling large ore carriers assure customers of prompt shipments.



















H.R.H. Prince Philip of Great Britain toured Mt. Newman last year and inspected equipment and facilities at Port Hedland and the mine site.

# **AMAX OVERSEAS MINING ACTIVITIES GROUP**

AMAX Overseas Mining Activities Group is responsible for the Company's interests in the Mt. Newman Iron Ore Project in Western Australia and some of its mining investments in southern Africa.

Iron Ore: AMAX's gross revenue from its 25% interest in the Mt. Newman Project was \$37 million in 1971, representing a 58% increase over 1970. Project sales of iron ore to Japan, Europe, and Australia rose to 18.3 million long tons, a 61% increase over the 11.6 million tons shipped in 1970.

The Project's iron ore sales are mostly covered by long-term contracts. Thus, generally lower demand for ore which developed during 1971 had little effect on shipments, but the revaluation of the Australian dollar had an adverse impact on profitability. However, as a result of the larger tonnage sold, 1971 net earnings showed a considerable increase over 1970 results.

In 1969 and 1970, worldwide demand for iron ore was strong. This trend reversed in 1971 when world iron ore demand dropped below productive capacity. It wasn't until the end of 1971 that the first evidence of an upturn in steel production in some countries, including the United States, was detected. Although recovery of steel production is not yet evident in several major steel-producing countries, the indicated long-term iron ore requirements should grow at an average rate of about 4.5% annually.

AMAX Mineral Sales Corporation acts as sales representative for the output of Mt. Newman iron ore, except for sales in Australia. AMAX Pacific Sales Corporation, a wholly owned subsidiary of AMAX Mineral Sales, is responsible for marketing Mt. Newman iron ore in Japan. Early in 1972, a sales office was established in Paris to expand service to European customers.

The excellent chemical and physical qualities of the high-grade hematite ore mined at Mt. Whale-back and the established performance record and reliability of the Mt. Newman Project have been recognized by steelmakers in Japan, Europe, and Australia. Current contracts for future shipments of Mt. Newman iron ore to Japan total more than 200 million long tons. In addition, approximately 70 million long tons have been contracted for sale in Australia, and shipments also are being made to European steelmakers.

Mt. Newman plans to raise its productive capacity in step with sales requirements to 35 million long tons of ore annually by 1975. As part of its expansion plans, Mt. Newman installed a second two-stage ore-crushing and train-loading complex at Mt. Whaleback during 1971. At Port Hedland, crushing capacity was expanded and additional stockpiling and reclaiming facilities are being constructed. In addition, the construction of a second shiploader is scheduled for completion in May, 1972.

Drilling of Mt. Whaleback increased high-grade ore reserves to 872 million long tons and indicated a potential in excess of one billion long tons. Exploration drilling of other iron ore deposits held under lease by the Mt. Newman joint venturers was carried out during the year and substantial tonnages of iron ore were indicated, generally of lower quality than at Whaleback.

A major milestone was reached during November, 1971 when the mining operations at Mt. Newman reached a million man-hours of work without a single lost-time accident. Only two other mining companies in Australia have achieved this coveted safety record.

Tsumeb Corporation Limited (29% equity): During 1971 Tsumeb produced 26,000 tons of blister copper and 70,000 tons of refined lead at its operations in South West Africa (Namibia). Reflecting substantially lower metal prices, the dividends paid by Tsumeb during calendar year 1971 were \$3.50 per share, down from \$7.00 per share in 1970.

In mid-December, metal production was severely curtailed by a strike of the African labor force, mainly drawn from the Ovambo area. The workers were protesting the Government's contract labor system under which they were employed. In January, 1972, an entirely new system of direct em-



Group Executive John Payne, Jr. (left) and AMAX Iron Ore Executive Vice President R. Bern Crowl at Mt. Newman production unit.

ployer-employee agreement was put into effect, and production is gradually returning to normal. In February, 1972, the Board of Tsumeb voted to omit the dividend.

# O'okiep Copper Company Limited (17% equity):

Production at O'okiep in the Republic of South Africa in 1971 was about 38,000 tons of blister copper. Dividends paid during calendar year 1971 were \$6.30 per share, down from \$15.40 in 1970, due mainly to lower copper prices and, to a lesser extent, increased operating costs.

Operations and Locations

# **AMAX OVERSEAS** MINING ACTIVITIES GROUP

New York, New York JOHN PAYNE, JR. Group Vice President

### **AMAX Iron Ore** Corporation

New York, New York Perth, Australia

R. BERN CROWL Executive Vice President

# AMAX Mineral Sales Corporation

Vice President

New York, New York R. BERN CROWL Executive Vice President Paris, France CHRISTIAN H. AALL

### **AMAX Pacific Sales** Corporation

New York, New York R. BERN CROWL Executive Vice President

# Investments in Other Companies ROBERT J. WRIGHT Manager

### Tsumeb Corporation Limited

(29% equity) South West Africa

# O'okiep Copper **Company Limited**

(17% equity) South Africa

# AMAX EXPLORATION AND ENVIRONMENT

In 1971, AMAX concentrated its major exploration efforts in the United States, Canada, Australia, and the United Kingdom, Nickel, molybdenum, copper, and coal were the primary exploration targets, but activities also included evaluation of tungsten, lead, zinc, oil, uranium, and silver prospects.

Total AMAX exploration costs for 1971 amounted to \$12.8 million, compared with \$11.6 million spent in 1970.

Exploration and Mine Evaluation: In addition to exploration financed entirely by AMAX, the Exploration and Mine Evaluation Division managed a number of exploration ventures involving financing by minority partners. These partners contributed approximately \$1 million of additional funds for participation in prospects owned or controlled by AMAX in 1971. Joint venture programs in 1972, involving a similar contribution by partners, will be maintained, but with reduced expenditures by AMAX. During the year, the technical staff of 120 earth scientists and mineral engineers drilled,

AMAX Vice President Ed Eisenach (with pencil), who is responsible for AMAX exploration and environmental activities, discusses environmental impact of a Company development project with members of staff.



mapped, and tested over 120 properties and, additionally, inspected some 230 prospects and operating mines as potential exploration ventures or acquisitions.

Australian Activities: The search for nickel in Western Australia was substantially broadened in 1971. AMAX has leases, options, and prospecting rights to more than 300,000 acres in the general geographic area where nickel discoveries have been made with other companies. Through participation with partners, the Company is evaluating another 200,000 acres. AMAX also is searching for copper in Western Australia and the Northern Territory, and a number of properties will undergo preliminary testing in 1972.

European Activities: Early in 1971, the Company was awarded prospecting rights to approximately 350,000 acres in Northern Ireland. These rights lie in a geological belt extending northward from the Republic of Ireland and are believed to contain lead, zinc, and silver prospects. With its partners, AMAX is conducting an extensive test program to assess the mineral potential of its holdings in Ireland. In 1972, oil and gas explorations in the North Sea will be continued in joint ventures.

Canadian Activities: In Canada, an extensive drilling campaign provided more details on the over 240,000 acres representing AMAX prospecting rights in the Manitoba nickel belt. Sufficient low-grade nickel reserves were outlined to warrant maintaining these rights. AMAX also carried out exploration for coal in Canada in 1971.

Exploration of a tungsten property in the MacMillan Pass area of the Yukon and Northwest Territories was sufficiently encouraging to justify expanded drilling and metallurgical testing in 1972.

U.S. Activities: AMAX intensified its search for new sources of molybdenum, coal, and copper in the western United States—primarily in Montana, Wyoming, Colorado, and Arizona.

AMAX Environmental Planning and Protection: Formed in mid-1970, the EP&P Committee is composed of representatives of each division of the Company. Its purpose is to assure the continuance of a positive, companywide effort on environmental

matters. AMAX's environmental performance has brought the Company and its operating units many national and local awards for environmental excellence.

Quarterly conferences at locations with a special environmental interest to the Company enable the Environmental Committee to direct itself to the specific environmental problems of the Company and develop plans and courses of action for future activities.

The Environmental Committee has also appointed a number of Task Force subcommittees to assist on specific problems. These intra-corporate teams are composed of experts in air and water quality control, land reclamation, and other environmental protection fields. They serve on an oncall basis to help with environmental issues at operating locations or with problems of concern to more than one AMAX operation or division.

Another current Committee effort is the establishment of a comprehensive communication system throughout the Company, enabling significant environmental control information to be channeled to and between local units and the Committee.

The Committee has identified individuals in AMAX with environmental skills or experience, as well as groups and individuals outside the Company who could provide assistance on environmental problems. It also monitors developments in pollution-abatement equipment and in environmental legislation and regulations. These efforts will enable the maximum utilization of existing expertise, both inside and outside the Company. AMAX involvement in the field of environmental protection and planning will be sound and represent the most current thinking.

Specific environmental accomplishments are detailed in the accompanying reports of group and division activities.

Environmental technicians at Intalco Aluminum smelter examine water cleaned by a new \$1.4 million scrubber-water recycling plant, first stage in a \$15.8 million pollution control program now under way at the facility in Washington State.



# **AMAX ALUMINUM GROUP**

The AMAX Aluminum Group produces primary and secondary ingot, semi-fabricated products such as sheet and extrusions, and fabricated products for the building construction, mobile home, recreational vehicle, and appliance markets. Sales in 1971 were \$286.8 million, compared with \$276.7 million in 1970.

AMAX Pacific Aluminum Corporation, which is responsible for bauxite, alumina, and primary aluminum, had lower sales of primary aluminum in 1971, primarily due to severely depressed prices. AMAX Pacific operated profitably in 1971.

AMAX Aluminum Company, Inc. heads the aluminum fabricating group, which increased its sales approximately 10% during 1971. AMAX Aluminum operated profitably in 1971, despite a drop of approximately 5% in selling price of fabricated products.

The primary aluminum market was characterized by oversupply resulting from the startup of new primary facilities in many locations throughout the Free World.

Estimates of long-range demand for primary aluminum in the Free World indicate a continuation of growth for many years ahead. Excess capacity, created largely by governmental subsidization of aluminum industries outside the United States, will require several years to be absorbed. Current low profitability of the industry and high capital requirements for future plants should discourage such governmental support in the future and return the industry to a balanced supply-demand relationship.

Bauxite: AMAX is organizing an international consortium to develop a bauxite mine and alumina plant in the Kimberley region of Western Australia. The plant will have an initial minimum capacity of 1.0 million long tons, and the capability of expansion to 2.4 million tons.

Primary Aluminum: Intalco Aluminum, in which AMAX has a 50% interest, produced a total of 260,000 short tons of primary aluminum in 1971, up from 247,000 tons produced in 1970. This was achieved by lower requirements for pot relining in 1971 and the use of higher electrical amperage. Computerization of potlines at Intalco is being implemented in 1972, allowing higher production rates. A new water purification and cryolite recovery operation that went on stream in late 1971 will

provide savings in raw material costs. Increased primary smelter capacity at various locations continues under study.

**Technical Services:** The new AMAX Technical Services supplies aluminum technology and knowhow and, during its first full year of operation, contributed technical assistance in design and construction of aluminum rolling mills in Romania and Turkey.

Environmental Control: Air and water purification programs now under way at Intalco will entail a combined expenditure of \$15.8 million by AMAX and its partner. The program will incorporate the most up-to-date and efficient techniques currently available. One portion of the system for purification and recycling of scrubber water is already on stream. Hooding of potlines is under way, as is a dry scrubbing system for all effluent air and fumes.

New plant construction is being designed to incorporate the most advanced techniques for capturing and recycling of effluent materials.

Architectural Products: Kawneer Company, Inc., a major supplier to the architectural aluminum market, increased its sales almost 10% over 1970. mainly by a large increase in direct contract billings. Kawneer expects to expand its aluminum wall and window market sales as sales of architectural aluminum products increase. Early in January of 1972, Kawneer introduced six new products, including I-Line® entrance and framing system and Core®-Wall, an addition to their Core® patented framing system. During early 1971, the new Kawneer plant at Visalia, California was completed and was in full production at mid-year. Kawneer Company Canada Limited was responsible for the engineering, manufacturing, and erection work in supplying curtain walls for the Commerce Court Tower in Toronto, This structure is 784 feet, has 57 stories, and is scheduled to be completed in 1972. It will be the tallest building in Canada.

Mill Products: AMAX Aluminum Mill Products, Inc. raised revenues 18% over 1970, chiefly as a result of increased sales to the mobile home industry. This occurred despite a price decline of approximately 5%. In anticipation of a substantial increase over the next five years in the use of prepainted aluminum sheet, Aluminum Mill Products has intro-

duced a new coating system, Improved Colorply®. It is expected that a new paint line at Joliet will increase production of prepainted aluminum sheet. This division has increased aluminum casting output approximately 25% with the addition of molten metal furnaces at the Joliet plant.

Extrusions: AMAX Aluminum Extrusion Products, Inc. manufactures aluminum extrusions for a wide variety of custom applications. Severely depressed prices in 1971 were offset by a 32% increase in sales and improved manufacturing efficiency.

Foil Products: Sales by AMAX Aluminum Foil Products Division rose by approximately 7% over 1970. Products of this division include aluminum and composition foils of lead, tin, and antimony. An extensive modernization and expansion program was completed at this division in 1971. Selectivity in product mix enabled the division to improve its sales relative to the aluminum foil industry as a whole. Increases in the use of aluminum foil containers for institutional feeding should benefit Foil Products.

International: AMAX Aluminum International Division increased its 1971 sales by 50% over 1970, partially as a result of increased market penetration by its products—aluminum sheet and extrusions. The increase also was due to conversion from partial to full AMAX ownership in 1970 of two facilities—Alumex, S.A. de C.V. and Mackamax Aluminium Limited. Sales in 1971 were fully consolidated. This division continues to expand its dealer distribution network in many foreign countries. During 1971, AMAX increased its interest in Hunter Aluminium Company Limited, in England, from 60% to 100%.

Top: AMAX management works closely with engineering, design, and construction firms in current and planned projects. The multitude of details to be considered at each stage requires highly coordinated efforts.

Center: Improved efficiency in such fabricating operations as this ingot casting line at Aluminum Mill Products partially offset increased labor costs and lower

Bottom: Kawneer craftsmen finish work on 56-foot spandrel, which is a part of curtain wall covering huge structural beams of Toronto's Commerce Court Tower.

selling prices during 1971.









David Mayers, Group Executive

Secondary Aluminum: Sales of Apex Smelting Co. showed only a slight decrease from 1970, in spite of strikes at two locations that tied up production from August 1 to September 7. Apex produces secondary aluminum ingot and primary zinc alloys and distributes primary aluminum ingot to the die-casting and foundry industries. A series of Apex-sponsored seminars to educate customers in uses of zinc for casting helped increase sales in the market in 1971, APIMAX, a division established in 1971 to trade in various grades of primary and secondary ingot and scrap, contributed to Apex's performance during the past year. Capital expenditures for 1972 will include a new furnace and improvement of air pollution-control equipment.

Residential Building Products: Manufacturing of residential siding and related products at AMAX Aluminum Building Products, Inc. was discontinued on December 31, 1971. Most of the machinery and equipment will be relocated by mid-year from Evansville, Indiana to Aluminum Mill Products plants in California, Georgia, and Indiana. Withdrawal from this market was prompted by long-term low profitability.

Del Wayne

Operations and Locations

# **AMAX ALUMINUM GROUP**

San Mateo, California DAVID MAYERS Group Vice President

# AMAX PACIFIC ALUMINUM CORPORATION

San Mateo, California
DAVID MAYERS
President
ROBERT MARCUS
Executive Vice President
MALCOLM BAYLISS
Vice President
BRUNO C. BOIK
Vice President
HERBERT C. CLOUGH
Vice President

Intalco Aluminum Corporation\* Ferndale, Washington

Kimberley Project Kimberley, Western Australia

AMAX Technical Services
San Mateo, California

\*50%-owned

# AMAX ALUMINUM COMPANY, INC.

South Bend, Indiana C. B. HUIZENGA President

# AMAX ALUMINUM MILL PRODUCTS, INC.

Riverside, California J. E. ROBERSON President

# Plants

Decatur, Alabama\* Joliet, Illinois Riverside, California

### Fabricated Products Branch Plants

Alvarado, Texas
Bloomsburg, Pennsylvania
Boise, Idaho
Dayton, Ohio
Elkhart, Indiana
Loveland, Colorado
McPherson, Kansas
Marshfield, Wisconsin
Ocala, Florida
Peachtree City, Georgia
Perris Valley, California
Sacramento, California
Stayton, Oregon
Tulsa, Oklahoma

# KAWNEER COMPANY, INC.

Niles, Michigan V. B. EVANS President

> Atlanta, Georgia Bloomsburg, Pennsylvania Carrollton, Kentucky Harrisonburg, Virginia Niles, Michigan Visalia, California

Kawneer Company Canada Limited Toronto, Canada

South Bend Screw Products, Inc. South Bend, Indiana

# AMAX ALUMINUM FOIL PRODUCTS

St. Louis, Missouri
DAVID A. GARDINER
President

# AMAX ALUMINUM INTERNATIONAL DIVISION

South Bend, Indiana

Alumex, S.A. de C.V. Mexico City, Mexico

AMAX Aluminium G.m.b.H. Rheydt, Germany

AMAX Aluminium S.A. Paris, France

**Euramax Aluminium N.V.**Roermond, The Netherlands

Hunter Aluminium
Company Limited
Aston Clinton, Bucks., England

Kawneer International Ltd.

Kawneer Jamaica Limited\* Kingston, Jamaica

Niles, Michigan

Mackamax Aluminium Limited Runcorn, Cheshire, England L. E. DUBÉ Group Vice President

# AMAX ALUMINUM EXTRUSION PRODUCTS, INC.

St. Charles, Illinois

R. L. BROWN
President

Plant City, Florida St. Charles, Illinois Hernando, Mississippi

# APEX SMELTING CO., INC.

Chicago, Illinois
DANIEL M. MOENICH
President

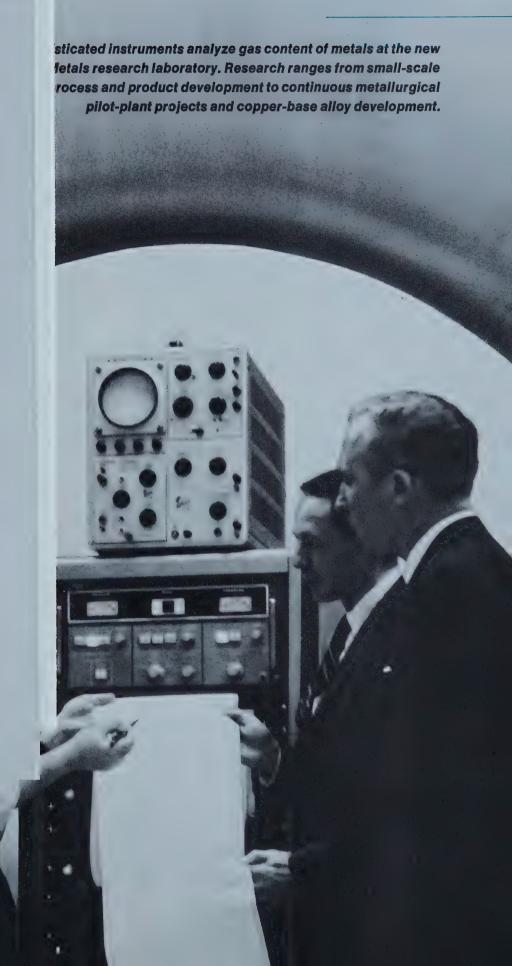
Chicago, Illinois Cleveland, Ohio Long Beach, California



Third
Quarter
Report
1972

3

1270 AVENUE OF THE AMERICAS ROCKEFELLER CENTER, NEW YORK, N.Y. 10020



G

Secondary Aluminum: Sales of Apex Smelting Co. showed only a slight decrease from 1970, in spite of strikes at two locations that tied up production from August 1 to September 7. Apex produces secondary aluminum ingot and primary zinc alloys and distributes primary aluminum ingot to the die-casting and foundry industries. A series of Apex-sponsored seminars to educate customers in uses of zinc for casting helped increase sales in the market in 1971. APIMAX, a division established in 1971 to trade in various grades of primary and secondary ingot and scrap, contributed to Apex's performance during the past year. Capital expenditures for 1972 will include a new furnace and improvement of air pollution-control equipment.

Residentia residentia Aluminum ued on De and equip Evansvill plants in drawal fro term low j

Operations and Locations

# **AMAX ALUMINUM GROUP**

San Mateo, California DAVID MAYERS Group Vice President

# AMAX PACIFIC ALUMINUM CORPORATION

San Mateo, California DAVID MAYERS President ROBERT MARCUS

Executive Vice President

MALCOLM BAYLISS Vice President BRUNO C. BOIK Vice President HERBERT C. CLOUG

HERBERT C. CLOUGH Vice President

> Intalco Aluminum Corporation\* Ferndale, Washington

Kimberley Project
Kimberley, Western Australia

AMAX Technical Services

San Mateo, California

\*50%-owned

# AMAX ALUMINUM COMPANY, INC.

South Bend, Indiana C. B. HUIZENGA President

# AMAX ALUMINUM MILL PRODUCTS, INC.

Riverside, California J. E. ROBERSON President

# Plants

Decatur, Alabama\* Joliet, Illinois Riverside, California

# Fabricated Products Branch Plants Alvarado, Texas

Bloomsburg, Pennsylvania
Boise, Idaho
Dayton, Ohio
Elkhart, Indiana
Loveland, Colorado
McPherson, Kansas
Marshfield, Wisconsin
Ocala, Florida
Peachtree City, Georgia
Perris Valley, California
Sacramento, California
Stayton, Oregon
Tulsa, Oklahoma

# KAWNEER COMPANY, Niles, Michigan

V. B. EVANS President

> Atlanta, Georgia Bloomsburg, Penn Carrollton, Kentuc Harrisonburg, Virg Niles, Michigan Visalia, California

Kawneer Company Canada Limited Toronto, Canada

South Bend Screw Products, Inc. South Bend, Indiana

AMAX ALUMINUM FOIL PRODUCTS

St. Louis, Missouri DAVID A. GARDINER President

# TO OUR SHAREHOLDERS

# **Earnings**

AMAX had net earnings of \$17,180,000 or 68 cents per common share for the third quarter of 1972, compared with earnings of \$11,860,000 or 46 cents a share in the third quarter of 1971.

This was the third consecutive quarter in which net earnings exceeded the previous quarter and were the highest for any AMAX third quarter. The previous high for third-quarter earnings occurred in 1969 and 1970 when the Company reported identical earnings of 66 cents for each period.

Net earnings from operations of \$15,770,000 in the third quarter of 1972 reflected improved performances in all groups. Earnings from operations for the third quarter of 1971 were \$8,790,000.

In the third quarter of 1972 dividends and other earnings, less interest expense, were \$1,410,000 after taxes, compared with the \$3,070,000 earned last year.

Earnings in 1972 were supported by increasing demand and sales, while 1971 results were affected by labor problems in some of the metal producing and consuming industries. The decrease in dividends and other earnings, less interest expense, resulted from lower RST International earnings, and lower dividends from Tsumeb Corporation Limited and O'okiep Copper Company Limited.

# **Nine Months Earnings**

Net earnings for the nine months of 1972 of \$47,430,000, or \$1.87 per share, were higher than the \$43,880,000, or \$1.75 per share, earned in the comparable period of 1971. Net earnings from operations of \$44,420,000 for the first three quarters of 1972 were 26% higher than the \$35,210,000 earned in the first nine months of 1971. Total dividend and other earnings, less interest expense, in the nine months of 1972 were \$3,010,000 after taxes, compared with \$8,670,000 in the first three quarters of 1971. Lower earnings from RST International, Inc., and reduced dividends from Tsumeb and O'okiep were the primary reasons for the decrease.

# **Business Highlights**

Sales for the nine-month period were \$635,-

Aston Clinton, Bucks., England

Kawneer International Ltd. Niles, Michigan

Kawneer Jamaica Limited\* Kingston, Jamaica

Mackamax Aluminium Limited Runcorn, Cheshire, England President

Chicago, Illinois Cleveland, Ohio Long Beach, California sticated instruments analyze gas content of metals at the new fetals research laboratory. Research ranges from small-scale

rocess and product development to continuous metallurgical pilot-plant projects and copper-base alloy development.



Second Quarter Report 1972

1270 AVENUE OF THE AMERICAS ROCKEFELLER CENTER, NEW YORK, N.Y. 10020

# Earnings

6

Residenti

residentia

Aluminum

ued on D

and equir

Evansvil

plants in

drawal fr

term low

TO OUR SHAREHOLDERS

AMAX had net earnings for the second quarter of 1972 of \$16,520,000, or 65 cents per common share, compared with 1971 second quarter earnings of \$15,700,000, or 63 cents per share.

Earnings reflected improved performances by the Aluminum, Base Metals, Fuels and Chemicals, and Overseas Mining Activities groups. Results from operations more than offset reduced dividend and other earnings.

Net earnings from operations were higher at \$15,250,000 in second-quarter 1972, compared with \$13,360,000 for second-quarter 1971. Dividends from investments and other earnings, less interest expense, were lower at \$1,270,000 after taxes for 1972, compared with \$2,340,000 for the 1971 second quarter.

# Six-Month Earnings

Net earnings for the first six months of 1972 were \$30,250,000, or \$1.19 per share, compared with \$32,020,000, or \$1.29 per share, for the first six months of 1971. Results for the six-month period were affected by reduced dividends from investments and other income. Total dividends and other earnings, less interest expense, in the first half of 1972 were \$1,600,000 after taxes, compared with \$5,600,000 in the first half of 1971.

This is the second consecutive quarter in which earnings from operations have exceeded such earnings for the corresponding quarter of 1971 with molybdenum still lagging behind 1971 earnings, primarily attributable to the current oversupply situation.

# **Business Highlights**

Sales for the six-month period were \$420.4 million, compared with \$406.7 million in the first half of 1971. Sales for the quarter amounted to \$218.1 million, compared with \$216.4 million in second-quarter 1971. All groups reported increased sales in first-half 1972, with the exception of molybdenum and associated metals.

# **New Developments**

An open-pit molybdenum mining operation contemplated for Climax, Colorado is expected to lower production costs and eventually increase combined output at the Climax

Secondary Aluminum: Sales of Apex Smelting Co. showed only a slight decrease from 1970, in spite of strikes at two locations that tied up production from August 1 to September 7. Apex produces secondary aluminum ingot and primary zinc alloys and distributes primary aluminum ingot to the die-casting and foundry industries. A series of Apex-sponsored seminars to educate customers in uses of zinc for casting helped increase sales in the market in 1971. APIMAX, a division established in 1971 to trade in various grades of primary and secondary ingot and scrap, contributed to Apex's performance during the past year. Capital expenditures for 1972 will include a new furnace and improvement of air pollution-control equipment

Operations and Locations

# **AMAX ALUMINUM GROUP**

San Mateo, California DAVID MAYERS Group Vice President

# AMAX PACIFIC ALUMINUM CORPORATION

San Mateo, California

DAVID MAYERS

President

ROBERT MARCUS

Executive Vice President

MALCOLM BAYLISS

Vice President

BRUNO C. BOIK

Vice President

HERBERT C. CLOUGH

Vice President

Intalco Aluminum Corporation\*

Ferndale, Washington

Kimberley Project Kimberley, Western Australia

AMAX Technical Services
San Mateo, California

\*50%-owned

# AMAX ALUMINUM COMPANY, INC.

South Bend, Indiana
C. B. HUIZENGA
President

# AMAX ALUMINUM MILL PRODUCTS, INC.

Riverside, California
J. E. ROBERSON

President

# Plants

Decatur, Alabama\* Joliet, Illinois Riverside, California

# Fabricated Products Branch Plants

Alvarado, Texas
Bloomsburg, Pennsylvania
Boise, Idaho
Dayton, Ohio
Elkhart, Indiana
Loveland, Colorado
McPherson, Kansas
Marshfield, Wisconsin
Ocala, Florida
Peachtree City, Georgia
Perris Valley, California
Sacramento, California
Stayton, Oregon
Tulsa, Oklahoma

# KAWNEER COMPAN' Niles, Michigan

V. B. EVANS President

> Atlanta, Georgia Bloomsburg, Per Carrollton, Kentu Harrisonburg, Vii Niles, Michigan Visalia, California

Kawneer Company Canada Limited Toronto, Canada

South Bend
Screw Products, Inc.
South Bend, Indiana

AMAX ALUMINUM FOIL PRODUCTS St. Louis, Missouri

St. Louis, Missouri
DAVID A. GARDINER
President

Aston Clinton, Bucks., England

Kawneer International Ltd. Niles, Michigan

Kawneer Jamaica Limited\* Kingston, Jamaica

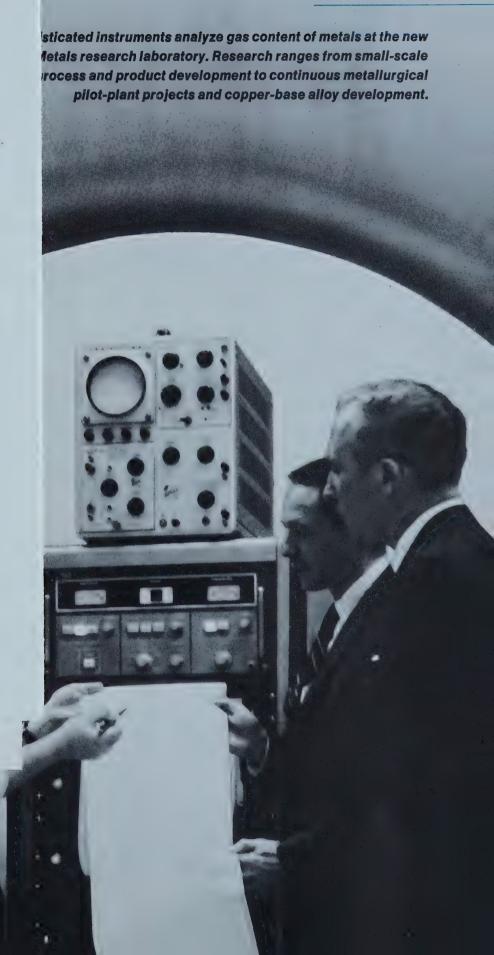
Mackamax Aluminium Limited Runcorn, Cheshire, England President

Chicago, Illinois Cleveland, Ohio Long Beach, California



# First Quarter Report 1972

1270 AVENUE OF THE AMERICAS ROCKEFELLER CENTER, NEW YORK, N.Y. 10020



Secondary Aluminum: Sales of Apex Smelting Co. showed only a slight decrease from 1970, in spite of strikes at two locations that tied up production from August 1 to September 7. Apex produces secondary aluminum ingot and primary zinc alloys and distributes primary aluminum ingot to the die-casting and foundry industries. A series of Apex-sponsored seminars to educate customers in uses of zinc for casting helped increase sales in the market in 1971. APIMAX, a division established in 1971 to trade in various grades of primary and secondary ingot and scrap, contributed to Apex's performance during the past year. Capital expenditures for 1972 will include a new furnace and improvement of air pollution-control equipment.

Reside resider Alumin ued on and eq Evans plants drawal term Ic

# Operations and Locations

# **AMAX ALUMINUM GROUP**

San Mateo, California DAVID MAYERS Group Vice President

# AMAX PACIFIC ALUMINUM CORPORATION

San Mateo, California
DAVID MAYERS
President
ROBERT MARCUS
Executive Vice President
MALCOLM BAYLISS
Vice President
BRUNO C. BOIK
Vice President
HERBERT C. CLOUGH
Vice President

Intalco Aluminum Corporation\* Ferndale, Washington

Kimberley Project Kimberley, Western Australia

AMAX Technical Services
San Mateo, California

\*50%-owned

# AMAX ALUMINUM COMPANY, INC.

South Bend, Indiana C. B. HUIZENGA President

# AMAX ALUMINUM MILL PRODUCTS, INC.

Riverside, California J. E. ROBERSON President

# Plants

Decatur, Alabama\* Joliet, Illinois Riverside, California

# Fabricated Products Branch Plants

Alvarado, Texas
Bloomsburg, Pennsylvania
Boise, Idaho
Dayton, Ohio
Elkhart, Indiana
Loveland, Colorado
McPherson, Kansas
Marshfield, Wisconsin
Ocala, Florida
Peachtree City, Georgia
Perris Valley, California
Sacramento, California
Stayton, Oregon
Tulsa, Oklahoma

# KAWNEER COMP.

Niles, Michigan V. B. EVANS President

> Atlanta, Geor Bloomsburg, Carrollton, Ke Harrisonburg, Niles, Michig Visalia, Califo

Kawneer Company Canada Limited Toronto, Canada

South Bend Screw Products, Inc.
South Bend, Indiana

# AMAX ALUMINUM FOIL PRODUCTS

St. Louis, Missouri DAVID A. GARDINER President

# TO OUR SHAREHOLDERS

# **Earnings**

Net earnings for the first quarter of 1972 were \$13,730,000, compared with \$16,320,000 in the first quarter of 1971. Fourth-quarter 1971 earnings were \$11,280,000 before extraordinary charges and \$7,470,000 after extraordinary charges.

Operating earnings in the first quarter of 1972 of \$13,400,000, after taxes, exceeded first-quarter 1971 operating earnings of \$13.-060,000. Earnings from other sources, including dividends, amounted to \$330,000 in first-quarter 1972, compared with \$3,260,000 in the corresponding 1971 period. This reduction resulted principally from reduced dividends and increased interest expense. Reduced dividend income was largely attributable to the fact that Tsumeb Corporation Limited, in which AMAX has a 29% equity. omitted its first-quarter 1972 dividend as a result of a labor stoppage during January. In the 1971 first quarter the Tsumeb dividend was \$960,000.

In the operating groups, first-quarter 1972 earnings improved in fuels and chemicals, overseas mining activities, aluminum, and base metals over first-quarter 1971; this was partly offset by lower earnings in molybdenum and specialty metals.

Primary per share earnings, computed on the average number of shares outstanding, amounted to 54 cents in first-quarter 1972, compared with 66 cents for the corresponding 1971 period, and 44 cents in the last quarter of 1971 before extraordinary charges of 16 cents per share. Fully diluted earnings, computed on the assumption that all convertible preferred stock had been converted and all stock options had been exercised, amounted to 54 cents and 64 cents per share for the first two quarters, respectively.

Sales in the quarter totaled \$202,300,000, compared with \$190,350,000 in first-quarter 1971, and \$181,240,000 in fourth-quarter 1971. Increased sales came from Company operations in lead, zinc, cadmium, aluminum, iron ore, and coal.

In accordance with Opinion #18 of the Accounting Principles Board, effective January 1, 1972, the Company adopted the equity method of accounting for a small Canadian affiliate (Canada Tungsten Mining Corporation Limited) in which its ownership exceeds

Aston Clinton, Bucks., England

Aston Official, Bucks., England

Kawneer International Ltd. Niles, Michigan

Kawneer Jamaica Limited\* Kingston, Jamaica

Mackamax Aluminium Limited Runcorn, Cheshire, England President

Chicago, Illinois Cleveland, Ohio Long Beach, California

# **New Developments**

On March 31, 1972, the Third Circuit Court of Appeals handed down its opinion on the ap-

peal of AMAX and Roan Selection Trust from a District Court decision arising out of the reorganization of RST. The Court of Appeals unanimously set aside the conclusion of the District Court that the terms under which AMAX acquired the public interest in Roan Selection Trust Limited (RST) were unfair. It also set aside findings that damages could be assessed against AMAX and that in negotiating the transaction AMAX had breached a fiduciary duty to the former RST shareholders.

The Court affirmed, however, by a 2-to-1 vote certain of the District Court's findings that RST's explanatory statement to shareholders did not comply in certain respects with Section 10 of the Securities Exchange

TALS OUP

e new -scale rgical ment.



# Consolidated Statement of Earnings

(Subject to Year-End Audit and Adjustment)

	Three Mont	Three Months Ended March 31		
	1972	1971		
Sales	\$202,300,000	\$190,350,000		
Total costs applicable to sales	182,170,000	172,270,000		
Earnings from operations	20,130,000	18,080,000		
Federal and foreign income taxes	6,730,000	5,020,000		
Net earnings from operations	13,400,000	13,060,000		
Other earnings, net of income tax (A)	330,000	3,260,000		
NET EARNINGS	\$ 13,730,000	\$ 16,320,000		
Net earnings per average number of common shares outstanding:				
Primary earnings	\$.54	\$.66		
Fully diluted (B)	.54	.64		

(A) Effective October 1, 1971, interest on general corporate borrowings, as well as specific project borrowings applicable to major construction projects, was capitalized. The amount of such interest capitalized in the first quarter of 1972 amounted to \$1,330,000 net of taxes, or 6¢ per share. If this policy had been in effect in the first quarter of 1971 net earnings would have been \$1,060,000 higher, an increase of 4¢ per share.

Included in 1972 are additional earnings of \$50,000 resulting from the implementation of the equity method of accounting as described elsewhere herein. Income has been reduced by \$140,000 for 1971, representing the excess of dividends received over equity in earnings for that period.

(B) Fully diluted earnings per share assume the conversion of all outstanding Convertible Preferred Stock as



St C in pr pr zir to of in in lis ar A<sub>t</sub> ex ar m

> OI AI Sai Aħ AL Sa DA Pre BC Ex MA Vic BF Vic HE Vic

Act of 1934, Although the dissenting opinion concluded that everything material had been disclosed, the majority held that the relationship of the proposals relating to the sale of 51% of RST's copper properties to Zambia and to its reorganization had not been made sufficiently clear, that the reasons for combining these proposals should have been discussed, and that certain other information included in the explanatory statement should have been given more prominence. Accordingly, it let stand the District Court order that former RST shareholders be given an opportunity to participate in RST International, Inc., AMAX's subsidiary to which RST's remaining operations and assets were transferred. AMAX has petitioned the full Court of Appeals for a rehearing of this portion of its decision.

During the quarter, a \$10.7 million expansion program was announced for the Little River Joint Venture in New Brunswick, Canada. The program will increase ore production by one-third at this lead-zinc-copper mine and mill, which is owned by AMAX's Canadian subsidiary, Heath Steele Mines Limited (75%) and The International Nickel Company of Canada, Limited (25%).

On April 13, operators for the Noordwinning Group, in which AMAX Petroleum holds a 20.9% interest, announced that they had tested gas in an exploratory well in the North Sea approximately 60 miles northwest of limuiden in The Netherlands. Additional studies are underway and further drilling will be necessary before the significance of the find can be fully evaluated. AMAX Petroleum also owns interests in other groups exploring for oil and gas in the United Kingdom and Norwegian sectors of the North Sea.

Also in February, the Intalco aluminum facility, 50%-owned by AMAX, completed the first stage in a comprehensive pollution-control program entailing expenditures of over \$15 million during a two-year period at the Ferndale, Washington primary smelter.

The appointment of David Mayers as group vice president for all AMAX aluminum activities was announced on February 22, 1972. Mr. Mayers, a corporate vice president, has been associated in management positions with AMAX Aluminum and other operations for many years.

A one-year labor contract at the AMAX-Homestake lead complex in Missouri was ratified by the United Steelworkers Union and will be effective retroactive to April 1, 1972, subject to approval by the Pay Board.

# **Dividends**

The Board of Directors declared a dividend of 35 cents per share on the common stock, payable June 1, 1972 to shareholders of record on May 10, 1972.

The regular quarterly dividend of \$1.3125 per share on the Series A Convertible Preferred Stock was declared, payable September 1, 1972 to shareholders of record on August 10, 1972.

Ian MacGregor

Chairman and Chief Executive Officer

April 19, 1972

Kimberley, Western Australia

AMAX Technical Services San Mateo, California

\*50%-owned

Alvarado, Texas
Bloomsburg, Pennsylvania
Boise, Idaho
Dayton, Ohio
Elkhart, Indiana
Loveland, Colorado
McPherson, Kansas
Marshfield, Wisconsin
Ocala, Florida
Peachtree City, Georgia
Perris Valley, California
Sacramento, California
Stayton, Oregon
Tulsa, Oklahoma

Canada Limited Toronto, Canada

South Bend Screw Products, Inc. South Bend, Indiana

AMAX ALUMINUM FOIL PRODUCTS St. Louis, Missouri DAVID A. GARDINER President Aston Clinton, Bucks., England

Kawneer International Ltd. Niles, Michigan

Kawneer Jamaica Limited\* Kingston, Jamaica

Mackamax Aluminium Limited Runcorn, Cheshire, England President

Chicago, Illinois Cleveland, Ohio Long Beach, California location from 43,000 to 60,000 tons of ore a day in step with sales requirements. The plan would make 80 million tons of new ore available. Initial site preparation is scheduled to begin in 1973 and production in 1974.

Sinking of the 3,000-foot No. 2 shaft at the Henderson Project was completed June 14. After the shaft has been mechanically equipped, crews will begin driving the railroad tunnel from the east. This will eventually connect with the tunnel being driven from the surface on the western slope. Current plans call for completion of the Henderson plant in the mid to late 1970s.

AMAX's Belle Ayr Mine in Campbell County, Wyoming is expected to begin production during the fourth quarter of 1972. This, the Company's first low-sulfur western coal mine, eventually will produce about 6 million tons of coal annually with 1.2 million tons going initially in early 1973 to the Comanche Electric Generating Station at Pueblo, Colorado, under a long-term supply agreement with Public Service Company of Colorado.

AMAX recently announced that it has exercised its option to purchase the electrolytic zinc plant of American Zinc Company located at Sauget, Illinois. It is planned to spend \$13.9 million in addition to the \$3 million purchase price for plant reactivation, improvements and process changes. An effective air- and water-pollution control program, to cost approximately \$2.5 million, is

# : METALS GROUP

s at the new small-scale etallurgical velopment.



# **Consolidated Statement of Earnings**

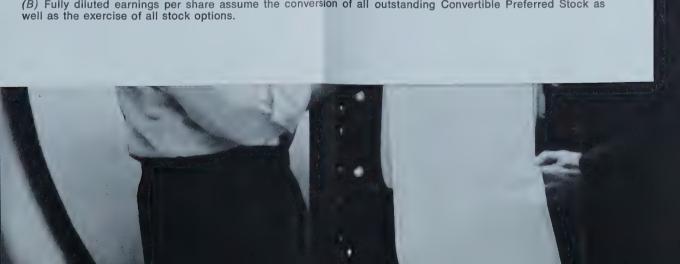
(Subject to Year-End Audit and Adjustment)

	Three Months Ended June 30		Six Months Ended June 30	
Sales	<b>1972</b> \$218,080,0 <b>00</b>	<b>1971</b> \$216,360,000	<b>1972</b> \$420,380,000	<b>1971</b> \$406,710,000
Total costs applicable to sales	194,740,000	196,670,000	376,910,000	368,940,000
Earnings from operations	23,340,000	19,690,000	43,470,000	37,770,000
Federal and foreign income taxes	8,090,000	6,330,000	14,820,000	11,350,000
Net earnings from operations	15,250,000	13,360,000	28,650,000	26,420,000
Dividends and other earnings, net of income tax (A)	1,270,000	2,340,000	1,600,000	5,600,000
NET EARNINGS	\$ 16,520,000	\$ 15,700,000	\$ 30,250,000	\$ 32,020,000
Net earnings per average number of common shares outstanding				
Primary earnings	\$.65	\$.63	\$1.19	\$1.29
Fully diluted (B)	.64	.61	1.18	1.25

(A) Effective October 1, 1971, interest on general corporate borrowings, as well as specific project borrowings, applicable to major construction projects was capitalized. The three and six months ended June 30, 1972 includes capitalized interest of \$1,500,000 and \$2,830,000 net of taxes, or 6¢ and 12¢ per share. If this policy had been in effect in the three and six months ended June 30, 1971 net earnings would have been \$960,000 and \$2,020,000 higher, an increase of 4¢ and 8¢ per share respectively.

Included in 1972 are earnings for the three and six months of \$30,000 and \$80,000 resulting from the implementation of the equity method of accounting in respect to our investment in Canada Tungsten Mining Corporation Limited. Income has been reduced by \$150,000 and \$290,000 for 1971, representing the excess of dividends received over equity in earnings for the three and six months.

(B) Fully diluted earnings per share assume the conversion of all outstanding Convertible Preferred Stock as



planned and a three-year labor agreement has been signed. Plant startup and initial zinc shipments are scheduled for early 1973. Operating at full capacity by 1975, the plant is expected to produce 84,000 tons of Special High Grade zinc annually.

An 18-month phaseout of the Blackwell Zinc smelter has been announced, with operations to continue into the final quarter of 1973. AMAX has donated 130 acres of land for industrial use, as part of a program of economic development for the town of Blackwell, Oklahoma.

A public offering of equity shares by Botswana RST that closed in late May was fully subscribed. As a result of the offering, the public holds 40% of Botswana RST and Anglo-American/Charter Consolidated and AMAX each owns 30%.

The basic investments of AMAX in the Botswana nickel-copper project are presently insured to the maximum extent possible, up to a coverage of \$25 million, against losses from inconvertibility of local currency holdings, expropriation and war damage. This insurance was issued by the Overseas Private Investment Corporation of Washington, D. C., and similar insurance was available to all eligible U. S. purchasers of shares of Botswana RST through the public offering.

The Noordwinning Group, of which AMAX is a member, reported a second wildcat well in the Dutch North Sea, which has been tested for gas. Evaluation of this discovery will require further exploratory drilling. AMAX has a 20.9% participation in the well.

A strike of the 160,000 member Japanese Seamen's Union that began on April 14 curtailed shipments on Japanese vessels and has adversely affected iron ore shipments from Mt. Newman in Western Australia during the latter part of the second quarter. The strike was settled on July 13.

# **Legal Matters**

The Third Circuit Court of Appeals has refused to grant an AMAX request for a rehearing of that portion of its decision letting stand a district court order that former Roan Selection Trust Limited shareholders be given an opportunity to participate in RST International, Inc., AMAX's subsidiary to which RST's non-Zambian operations were transferred. The plaintiff has petitioned for review

Second

Co. sho in spite producti produce zinc allo to the di of Apexin uses in the m lished in and sec Apex's p expendiand imp ment.

Operation

AMAX A San Mateo,

DAVID MAY Group Vice

AMAX PAC ALUMINUI San Mateo, DAVID MAY President ROBERT M, Executive V MALCOLM Vice Presid BRUNO C. I Vice Presid HERBERT ( Vice Presid

Intalco Ferndal

Kimberle:

AMAX Te

\*50%-owned

Loveland, Colorado McPherson, Kansas Marshfield, Wisconsin Ocala, Florida Peachtree City, Georgia Perris Valley, California Sacramento, California Stayton, Oregon Tulsa, Oklahoma South Bend, Indiana

AMAX ALUMINUM FOIL PRODUCTS St. Louis, Missouri DAVID A. GARDINER President by the Supreme Court of the United States of the portions of the decision adverse to plaintiff and AMAX also plans to seek review.

All major copper producers, including AMAX, have had their records subpoenaed for purposes of a Federal grand jury in what appears to be an investigation by the Justice Department of copper pricing and production policies during the 1950s and 1960s.

A suit has been filed against Blackwell Zinc Company, Inc., a wholly-owned subsidiary of AMAX, by a number of residents of Blackwell, Oklahoma in the vicinity of the Blackwell zinc smelter, seeking \$4.8 million for alleged damages. Other environmental suits pending against AMAX or affiliates seek an additional \$6.4 million as a result of alleged damages from operations in aluminum and coal. These actions are being contested and it is believed that, in any event, the amounts of the alleged damages claimed are vastly overstated.

# Stock Listing

Beginning July 10, the shares of AMAX Common Stock and AMAX Series A Convertible Preferred Stock have been listed for trading on the Pacific Coast Stock Exchange in San Francisco and Los Angeles, and the Midwest Stock Exchange in Chicago, in addition, of course, to the New York Stock Exchange.

Continental Illinois National Bank and Trust Company of Chicago and Bank of America National Trust and Savings Association in Los Angeles will be co-transfer agents. Manufacturers Hanover Trust Company continues as the principal transfer agent.

# **Dividends**

The Board of Directors declared a dividend of 35¢ per share on the common stock, payable September 1, 1972 to shareholders of record on August 10, 1972.

The regular quarterly dividend of \$1.3125 per share on the Series A Convertible Preferred Stock was declared, payable December 1, 1972 to shareholders of record on November 10, 1972.

Ian MacGregor

Chairman and Chief Executive Officer

July 20, 1972

Aston Clinton, Bucks., England

**Kawneer International Ltd.** Niles, Michigan

Kawneer Jamaica Limited\* Kingston, Jamaica

Mackamax Aluminium Limited Runcorn, Cheshire, England President

Chicago, Illinois Cleveland, Ohio Long Beach, California 180,000 compared with 575,680,000 in the comparable period in 1971. Sales for the third quarter totaled \$214,800,000, compared with 1971 third quarter sales of \$168,970,000. All operating groups reported increased sales for the third quarter as compared to the 1971 similar period.

# **Recent Developments**

During the quarter, AMAX announced that it is continuing its investigations on a proposal to acquire Banner Mining Company, whose principal assets are copper mining properties, including the Twin Buttes mine, in Pima County, Arizona, which are leased to The Anaconda Company. The Twin Buttes mine,

an open-pit copper mine, has an output of approximately 75,000 tons per year of copper contained in concentrates. In connection with this proposal The Anaconda Company has indicated its intent to enter into an agreement to form a 50-50 partnership with AMAX to operate and develop further the Twin Buttes mine.

The arrangements are subject to the approval of the Boards of Directors of Banner, Anaconda and AMAX, the shareholders of Banner, and the receipt of favorable rulings from tax and other government agencies. As a part of the transaction, AMAX has agreed to acquire the assets of Tintic Standard Mining Company, which holds 11.3% of the

# AMAX E METALS GROUP

is at the new small-scale netallurgical evelopment.



# **Consolidated Statement of Earnings**

(Subject to Year-End Audit and Adjustment)

	Three Months Ended Sept. 30		Nine Months Ended Sept. 30	
Sales	1972 \$214,800,0 <b>00</b>	<b>1971</b> \$168,970,000	<b>1972</b> \$635,180,000	<b>1971</b> \$575,680,000
Total costs applicable to sales	193,500,000	156,640,000	570,410,000	525,580,000
Earnings from operations	21,300,000	12,330,000	64,770,000	50,100,000
Federal and foreign income taxes	5,530,000	3,540,000	20,350,000	14,890,000
Net earnings from operations	15,770,000	8,790,000	44,420,000	35,210,000
Dividends and other earnings, less interest expense, net of income tax (A)	1,410,000	3,070,000	3,010,000	8,670,000
NET EARNINGS	\$ 17,180,000	\$ 11,860,000	\$ 47,430,000	\$ 43,880,000
Net earnings per average number of common shares outstanding				
Primary earnings	\$.68	\$.46	\$1.87	\$1.75
Fully diluted (B)	.67	.46	1.85	1.71

(A) Effective October 1, 1971, interest on general corporate borrowings, as well as specific project borrowings, applicable to major construction projects was capitalized. Earnings for the three and nine months ended September 30, 1972 include capitalized interest of \$1,450,000 and \$4,280,000 net of taxes, equivalent to 6¢ and 18¢ per share. If this policy had been in effect in the three and nine months ended September 30, 1971 net earnings would have been \$1,280,000 and \$3,300,000 higher, equivalent to an increase of 6¢ and 14¢ per share respectively. Included in 1972 are earnings for the three and nine months of \$10,000 and \$90,000 resulting from the implementation of the equity method of accounting in respect to our investment in Canada Tungsten Mining Corporation Limited. Income for the three months ended September 30, 1971 has been increased by \$50,000 representing AMAX's equity in Canada Tungsten's earnings and the nine months reduced by \$240,000, representing the excess of dividends received over equity in earnings.

(B) Fully diluted earnings per share assume the conversion of all outstanding Convertible Preferred Stock as well as the exercise of all stock options.



Secondary Aluminum: Sales of Apex Smelting Co. showed only a slight decrease from 1970, in spite of strikes at two locations that tied up production from August 1 to September 7. Apex produces secondary aluminum ingot and primary zinc alloys and distributes primary aluminum ingot to the die-casting and foundry industries. A series of Apex-sponsored seminars to educate customers in uses of zinc for casting helped increase sales in the market in 1971. APIMAX, a division established in 1971 to trade in various grades of primary and secondary ingot and scrap, contributed to Apex's performance during the past year. Capital expenditures for 1972 will include a new furnace and improvement of air pollution-control equipment

Resic reside Alum ued c and e Evan plant drawa term

offer to former shareholders of Roan Selection Trust Limited an opportunity to acquire a pro rata share in RST International, Inc. upon return by such shareholders of the securities and monies received pursuant to the reduction of capital of Roan Selection Trust Limited, Implementation of this order will require further proceedings before the District Court.

### **Dividends**

The Board of Directors declared a dividend of 35 cents per share on the common stock, payable December 1, 1972 to shareholders of record on November 10, 1972.

The regular quarterly dividend of \$1.3125 per share on the Series A Convertible Preferred Stock was declared, payable March 1, 1973 to shareholders of record on February 13, 1973.

Ian MacGregor

Chairman and Chief Executive Officer

October 17, 1972

Operations and Locations

# **AMAX ALUMINUM GROUP**

San Mateo, California DAVID MAYERS Group Vice President

# **AMAX PACIFIC** ALUMINUM CORPORATION

San Mateo, California DAVID MAYERS President ROBERT MARCUS Executive Vice President MALCOLM BAYLISS Vice President BRUNO C. BOIK Vice President HERBERT C. CLOUGH Vice President Intalco Aluminum Corporation\*

Ferndale, Washington

**Kimberley Project** Kimberley, Western Australia

**AMAX Technical Services** San Mateo, California

\*50% -owned

# **AMAX ALUMINUM** COMPANY, INC.

South Bend, Indiana C. B. HUIZENGA President

### AMAX ALUMINUM MILL PRODUCTS, INC.

Riverside, California J. E. ROBERSON President

Decatur, Alabama\* Joliet, Illinois Riverside, California

### **Fabricated Products Branch Plants**

Alvarado, Texas Bloomsburg, Pennsylvania Boise, Idaho Dayton, Ohio Elkhart, Indiana Loveland, Colorado McPherson, Kansas Marshfield, Wisconsin Ocala, Florida Peachtree City, Georgia Perris Valley, California Sacramento, California Stayton, Oregon Tulsa, Oklahoma

# KAWNEER COM Niles, Michigan V. B. EVANS

President Atlanta, Ged Bloomsburg, Carrollton, F Harrisonburg Niles, Michi

Kawneer Comp Canada Limited Toronto, Canada

Visalia, Calif.

South Bend Screw Products, Inc. South Bend, Indiana

AMAX ALUMINUM FOIL PRODUCTS

St. Louis, Missouri DAVID A. GARDINER President

Aston Clinton, Bucks., England

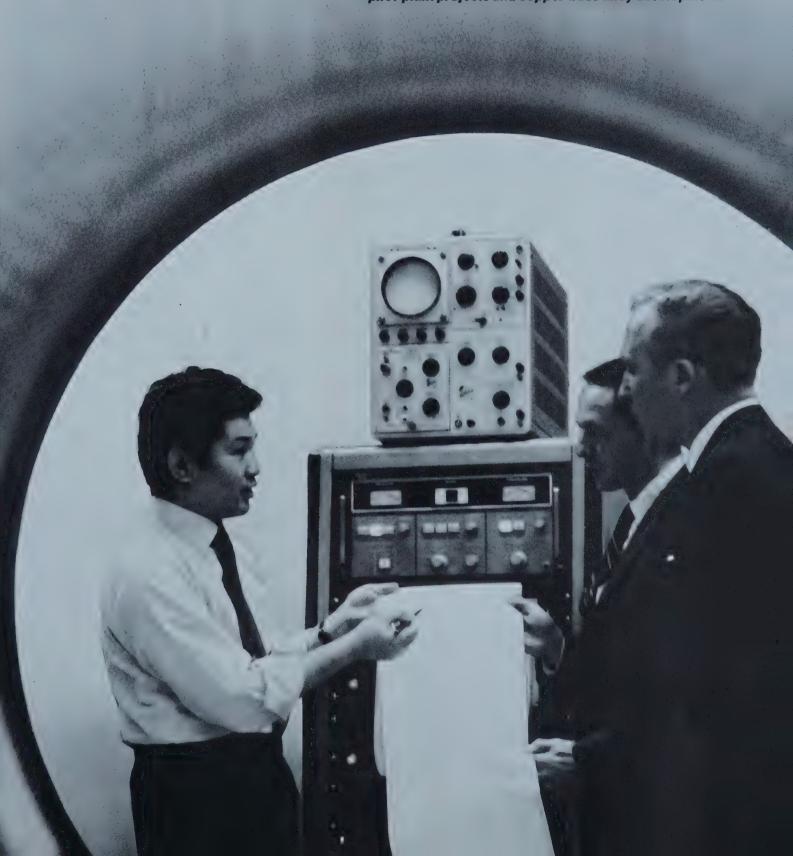
Kawneer International Ltd. Niles, Michigan

Kawneer Jamaica Limited\* Kingston, Jamaica

Mackamax Aluminium Limited Runcorn, Cheshire, England

President

Chicago, Illinois Cleveland, Ohio Long Beach, California Sophisticated instruments analyze gas content of metals at the new Base Metals research laboratory. Research ranges from small-scale process and product development to continuous metallurgical pilot-plant projects and copper-base alloy development.







# **AMAX BASE METALS GROUP**

Sales of copper, lead, zinc, cadmium, precious metals, and related products fell to \$205 million in 1971—a 26% decrease from the 1970 figure. The decline reflected generally lower metal prices and the industrywide strike that affected AMAX's copper and precious metals refinery at Carteret, N.J.

Average market prices of base and precious metals, with the exceptions of zinc and gold, were all lower in 1971. Increasing costs of labor and supplies during the year also contributed to lower profitability.

Copper: AMAX's subsidiary, the United States Metals Refining Company (U.S.M.R.), produced 182,000 tons of refined copper at the Carteret refinery, down from 215,000 tons in 1970. The major reason for this drop was the five-week strike in July and August and subsequent startup problems after the strike ended. About 65% of the copper produced at U.S.M.R. was on a toll basis for customers, with the remainder for AMAX's account.

In spite of generally slack demand for copper in the United States, AMAX was able to market all of its output. About one-third of U.S.M.R.'s production was marketed in the form of a variety of specialty coppers for high-technology applications. Profitability of refining operations was affected by higher costs of labor, power, and fuel. Increased competition for scrap, at a time of lower scrap generation, raised raw material costs and narrowed operating margins.

About \$800,000 was spent on environmental control in 1971, bringing the total for the last five years to \$6.5 million for systems to improve the effectiveness of existing controls and evaluating or developing new techniques. Approximately \$4 million of capital spending is slated for environmental control in the next five years.

In 1972, AMAX expects to commence sales of new copper alloys emerging from the Company's research for electronic and electrical applications.

Above: Rod mill at AMAX-Homestake Lead complex is inspected for wear.

Below: The first cathode-straightening press was part of U.S.M.R.'s \$3.9 million capital expenditure that also included prototype insulated wire scrap-handling equipment and expansion of precious metals refining facilities.

The Company's OFHC® copper and its electrolytic copper powder produced at Carteret continue their leadership in the field of copper specialties, for which markets should expand in the coming years. Uses of OFHC copper have been as electrically active elements in the world's most powerful nuclear accelerator at the National Accelerator Laboratory at Batavia, Illinois, and as the inner conductor of undersea cables.

Precious Metals: Silver output at Carteret fell to 20 million ounces from 40 million in 1970 as the result of the strike and a decrease in coin bullion input. Recovery of gold remained at about 1 million ounces.

Iron Powder: At the Pyron Company, Niagara Falls, New York, AMAX produces iron powder products noted for their high uniformity and ability to form parts of a given size that are lighter than those made from powders produced by other processes, without sacrificing the strength of the finished part. Output of this plant increased 24% to 22 million pounds in 1971 and represented about 10% of all iron powders consumed in the structural parts industry.

The unique characteristics of AMAX's powders have enabled the Company to maintain its broad sales base in the face of substantial industry overcapacity which has already forced a number of producers in the United States and Canada to close.

Lead: In the second full year of operations at the AMAX and Homestake Mining Company lead complex in Missouri, ore production increased over 40% to 1,343,000 tons. The increased ore production, plus improved feed grade, resulted in approximately 61% greater production of lead and zinc concentrates.

Smelter production declined slightly to 109,000 tons of refined lead as the result of a brief shutdown to rectify operating problems. Of the total production, 52,000 tons were for the AMAX-Homestake 50% joint venture and 57,000 tons on toll for others.

Profitability of the lead business increased as a result of improved productivity and greater lead and zinc concentrate sales.

Domestic lead consumption was strong during the year and supported a ½¢ price increase in June to 14.0¢ per pound delivered in the U.S. and two



AMAX and International Nickel Company officials discuss results of using "raise-boring" at Heath Steele in Canada.

further increases to 15.5¢ in February, 1972. Although the long-range outlook for lead in gasoline is in question, the general picture is for a steady market sustained by high demand for lead batteries.

Heath Steele Mines: Through a wholly owned Canadian subsidiary, AMAX has a 75% interest in a joint venture with The International Nickel Company of Canada, Limited in a lead-zinc-copper mine and mill in New Brunswick, Canada. Ore production at 972,000 tons was slightly less than 1970 and concentrates produced totaled 80,000 tons of zinc concentrates, 45,000 tons of lead concentrates, and 26,000 tons of copper concentrates. The feed grade was down slightly, but was offset by higher recoveries of metals in the concentrates. The decline of the copper price in 1971 reduced earnings.

AMAX's share of capital expenditures at Heath Steele was \$3 million and included a major portion of a water-pollution abatement plan started in 1970. The program is designed to contain and treat mine and surface drainage waters to improve the quality of water in the area's streams. In 1972, work is expected to commence on a four-year program that will both expand production and increase metal recoveries. The total program is expected to cost \$10.7 million.

Zinc: AMAX's smelter at Blackwell, Oklahoma produced 85,000 tons of slab zinc in 1971, an increase over the 81,000-ton output in 1970. Despite greater zinc metal sales, total profitability was hurt by a substantial drop in the price of byproduct cadmium, together with higher costs of labor and supplies and lower zinc recoveries.

Although the zinc industry did not have a strong year in 1971, the future looks promising as major markets respond to a stimulated U.S. economy.

AMAX currently holds an option to purchase for \$3 million the electrolytic zinc refinery of American Zinc Company at Sauget, Illinois, near St. Louis. A feasibility study to determine economic viability is being conducted. Reactivation of this plant would



AMAX official, the Forest Service, and University of Missouri representatives inspect flora near AMAX-Homestake Lead complex as part of unique cooperative environmental-control study program.

provide the Company with capacity of 75,000-85,000 tons of Special High Grade zinc.

Cadmium: Sales of cadmium were 1.6 million pounds, an increase of 17% over 1970, and represented about 15% of U.S. consumption, Despite occasional sharp price fluctuations, the general trend of cadmium demand is upward. With the shutdown of several U.S. zinc plants, byproduct cadmium production has been curtailed, and a healthier supply-demand relationship is developing, as shown by price increases in early 1972.

Labor Relations: The only Base Metals labor contract to be renegotiated in 1971 was at the Carteret refinery, following a five-week strike. In 1972, contracts expire at Blackwell Zinc, Heath Steele, and the AMAX-Homestake Lead complex.

Mining Development: During 1971, the Puerto Rican Government responded to the copper mining proposal submitted jointly by AMAX and Kennecott Copper Corporation and provided guidelines for further discussions. It is not possible to state at this time whether the project will be able to

AMAX is maintaining its position on copper reserves at Kirwin, Wyoming and is continuing evaluation of the prospective venture and undertaking a comprehensive environmental inventory and impact study.





John Towers, Group Executive

#### Operations and Locations

#### AMAX BASE METALS GROUP

New York New York JOHN TOWERS Group Vice President H. B. CONOLLY Vice President-Finance

#### AMAX COPPER DIVISION

New York, New York R. E. WOLFF President W. R. WENZEL

Controller

#### AMAX COPPER, INC.

New York, New York A. H. SCHMIDT-FELLNER K. G. BERGMAN Vice President, Marketing and Sales Vice President, Raw Material Purchases

#### UNITED STATES METALS REFINING COMPANY

Carteret, New Jersey A. H. SCHMIDT-FELLNER President J. J. CORDIANO Vice President and General Manager R. BROWN Plant Manager

#### AMAX METAL POWDERS

Niagara Falls, New York V. T. PRICE, JR. General Manager

#### PONCE MINING COMPANY, INC.\*

New York, New York D. H. ACKERMAN Vice President R. A. BRADLEY, JR. Utuado, Puerto Rico

#### AMAX LEAD & ZINC DIVISION

New York, New York J. G. McCULLOUGH President H. B. CONOLLY Vice President and Controller

#### AMAX LEAD & ZINC, INC.

New York, New York E. V. FRAWLEY Vice President, Director of Marketing R. J. O'HARA

Vice President, Director of Raw Material Purchases and Sales

А. К. ВООТН Vice President, Zinc Operations

#### BLACKWELL ZINC COMPANY, INC.

Blackwell, Oklahoma J. E. GORMAN Plant Manager

#### MISSOURI LEAD OPERATING COMPANY

Boss, Missouri M. N. ANDERSON General Manager

#### HEATH STEELE MINES LIMITED

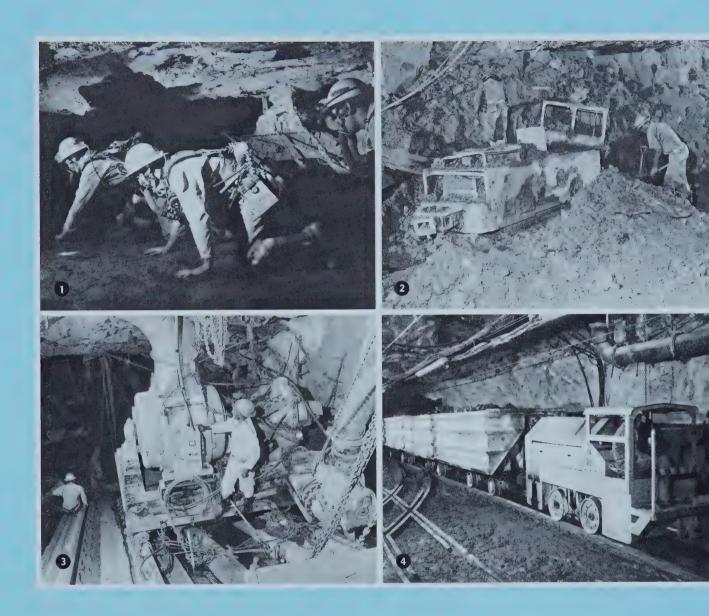
Newcastle, N.B., Canada R. D. BAKER General Manager

#### AMAX BASE METALS RESEARCH & DEVELOPMENT, INC.

Carteret, New Jersey W. R. OPIE President

<sup>\*85%-</sup>owned

### RST International, Inc.



Net earnings of the RST International Group amounted to \$12.8 million compared with \$11.5 million in the previous year.

Earnings from operations were lower (\$3.2 million compared with \$6.8 million) mainly as a result of lower metal prices, weaker markets, and the effects of the cave-in at the Mufulira Mine. Dividend receipts from Roan Consolidated Mines Limited—which began operations in January, 1970 and started paying dividends in October of that year —were higher (\$6.3 million before U.S. taxes com-

### Progress report on rehabilitation of Mufulira Mine:

- 1 Mine rescue teams were in action within an hour of September, 1970 cave-in.
- 2 A locomotive is recovered at the 2165foot level (660 meters).
- 3 Temporary installations pump out water that flooded in after the loss of much pumping capacity.
- 4 Clearing haulage area permitted an underground train to move ore at 1903-toot level (580 meters).



Construction under way on shaft at Chambishi Mine that will add open-pit operations to an underground mine in late 1970s at a cost of \$56 million.

pared with \$4.2 million) as a result of four quarterly dividends being received in 1971 against only one in 1970. However, in 1970 AMAX received two final dividends from Roan Selection Trust Limited amounting to \$12,630,000 before U.S. taxes.

Interest and other income of \$9.5 million before tax included interest on Zambian Government bonds issued in connection with the Government's acquisition in 1970 of a 51% equity in the RST Group's copper mining operations in Zambia. There remains outstanding \$35 million principal amount to be repaid on the bonds held by RST International, after receiving scheduled repayments totaling \$4.3 million in 1971.

Zambia: Output from the copper mining operations of Roan Consolidated Mines Limited (those mines in Zambia previously controlled and operated by RST) continued to reflect the lower production of Mufulira, which is still recovering from the effects of a major cave-in at the mine in September, 1970.

Total production of the Group amounted to 232,000 metric tons, which was 57,000 tons less than the previous year.

AMAX's 20% interest in RCM is held by its wholly owned subsidiary, RST International, Inc., which also has contracts to manage the mines, to act as exclusive sales agent, and to perform other services for RCM.

The accident at Mufulira, in late 1970, together with significantly lower copper prices during the year, had an adverse effect on RCM earnings, resulting in substantial reductions in sales commissions, management fees, and dividend payments.

The long and costly process of rehabilitation at Mufulira has continued steadily. Output had reached a rate of about 8,000 metric tons a month of finished

copper at year-end 1971—about half of that planned before the accident. However, production was temporarily reduced early in 1972 as a result of operational difficulties at Prain Shaft.

In order partially to offset the losses at Mufulira, special efforts have been made since the cave-in to accelerate ore production at other mines of the Group.

At Chambishi, at present an open-pit operation with an annual capacity of 24,000 metric tons of copper, development of underground mining is scheduled to increase output to 48,000 tons a year by mid-1973. When the open pit is fully depleted in about six years' time, it is planned that underground production will have reached the full rate of 48,000 tons. Cost of the project is estimated at \$56 million, most of which is being provided by loan finance.

In February, 1971, RCM acquired the Baluba orebody from RST International, Inc. and Zambia Copper Investments Limited for \$7.28 million, which was these companies' invested cost in that property. This orebody is located near the Luanshya Mine and is being developed as part of the Luanshya division of RCM. Production is planned to begin in 1973 and should reach an annual rate of 22,000 metric tons by the second half of that year. Later, as output from the older sections of the Luanshya Mine declines, production from Baluba is planned to be increased to 50,000 tons a year.

Production at Kalengwa, RCM's open-pit mine 200 miles west of the Copperbelt, has increased to a rate of 13,600 metric tons of copper a year, following the commissioning of a concentrator in March, 1971.

Ametalco Group: The Ametalco Group of subsidiaries of RST International continued to operate an international metals sales and trading agency for copper, lead, zinc, and various other metals and minerals.

The Group's 1971 earnings were lower than for 1970. Agency commissions were adversely affected by a marked decrease in metal prices generally and by lower tonnages available from principals for sale on their behalf. Unfavorable market conditions, especially during the latter half of the year, tended

### RST International, Inc. Financial Information

Consolidated Statement of Financial Pos	cial Position Consolidated Statement of Earnings					
for the years ended December 31, 1971 and	d 1970	for the years ended De	cember 31	l, 1971 and	d 1970	
(IN THOUSAN	NDS) 1970				(IN THOU <b>1971</b>	(SANDS) 1970
Accounts receivable       7,086         Inventories       11,075         Other current assets       1,297         Current assets       126,718         Investments (See note below)       80,409         Property, plant and equipment       3,630         Frozen assets*       7,148         Other assets       895	88,344 12,906 3,207 3,963 108,420 85,561 12,525 7,074 375 213,955	Fees, commissions and net trading revent Selling, general and administrative expert Exploration and mining investigation explorations and mining investigation explorations.  Dividends on RCM shares.  Interest and other income.  Earnings before taxes.  Provision for taxes.  NET EARNINGS	uses penditures		\$12,676 (8,304) (1,178) 3,194 6,318 9,528 19,040 6,228 \$12,812	\$17,903 (9,588) (1,506) 6,809 4,250 9,243 20,302 8,752 \$11,550
LIABILITIES			Dec. 3	1, 1971	Dec. 3	1, 1970
Provision for income taxes 10,394 Current liabilities 23,862	21,663 7,865 29,528	NOTE Investments in quoted securities: Zambia Industrial & Mining Corp.	COST	MARKET VALUE	COST	MARKET VALUE
Note payable to AMAX \$ 3,000 \$ Shareholders' equity** 190,868 1	592 2,925 33,045 3,000 177,910	6% Guaranteed Dollar Bonds due 1978, principal amount Dec. 31, 1971, \$34,980,000; 1970, \$39,260,000 Roan Copsolidated Mines 6,192,424 B shares of K4 (\$5.60) par value (20%	\$34,345	\$18,529	\$38,551	\$16,085
Net assets <u>\$193,868</u> <u>\$1</u>	180,910	Other  Less amounts due within one year		27,680 3,673 49,882 2,068	34,866 3,050 76,467 4,206	17,648 <u>5,205</u> 38,938 <u>1,755</u>
*Consisting of cash, accounts receivable, and Rh desian securities, which currently cannot be withdraw from Rhodesia under exchange control regulation **Includes net assets of \$3,170,000 attributable to Rhodesian subsidiary.	vn ns.	Investments in unquoted securities, excludes current portion (1971, \$723,000; 1970, \$593,000)		\$47,814	72,261 13,300 \$85,561	\$37,183

to decrease trading profits, particularly in silver in which an over-all loss for the year was incurred.

Litigation: An appeal by AMAX and Roan Selection Trust Limited (RST) from the decision of a United States District Court in a class action brought by an RST shareholder is pending before the Third Circuit Court of Appeals in Philadelphia. In the decision appealed from, the District Court held that the terms of the August, 1970 reduction of capital of RST (whereby RST became a wholly owned subsidiary of AMAX) were unfair to share-

holders of RST other than AMAX, that the proxy material used was misleading, and that AMAX had breached its duty to these shareholders. The District Court ordered AMAX to offer such shareholders the opportunity to acquire a pro rata share in RST International, Inc., and, on plaintiff's motion, amended and supplemented this order to impose certain costs on AMAX, and to provide for supplementary proceedings as to the form of relief, including the possible assessment of damages against AMAX.

#### RST INTERNATIONAL, INC.

New York, New York

Subsidiary Companies

RST INTERNATIONAL METALS LIMITED London, England

RST MANAGEMENT SERVICES LIMITED Lusaka, Zambia

CONTIFINANCE S.A.
Luxembourg, Luxembourg

RST (BERMUDA) LIMITED Hamilton, Bermuda

AMETALCO GROUP, consisting of seven companies located in England, the United States, Canada, Germany and Switzerland.

RST MINE SERVICES LIMITED Lusaka, Zambia

**BARRINGER FIJI LIMITED** (60%) Suva, Fiji

MWINILUNGA (1970) LIMITED (53.8%) Lusaka, Zambia Associated Companies

ROAN CONSOLIDATED MINES LIMITED (20.4%) Lusaka, Zambia

CHISANGWA MINES LIMITED (42.2%) Lusaka, Zambia

#### **Botswana RST**

The major financing and related arrangements for the Selebi-Pikwe nickel-copper project in Botswana (described in last year's Annual Report) were completed on March 7, 1972 at Gaborone, Botswana. These arrangements and a corporate reorganization of Botswana RST Limited (BRST) had to be postponed in mid 1971 because of uncertainties that arose concerning the long-term sales contract for the project's nickel and because of a substantial increase in estimated capital costs.

As a result of the corporate reorganization approved by BRST shareholders in January, 1972 AMAX (directly and indirectly through RST International, Inc.) and the Anglo American Corporation of South Africa, Limited, Charter Consolidated Limited and certain of their associated companies (the AAC/Charter Group) will each own approximately 30% of BRST. The public will hold the remaining 40%, assuming the public shareholders fully subscribe their \$13.4 million portion of a rights offering which is expected to be made in April, 1972. This offering will be underwritten equally by AMAX and Anglo American, which have

also agreed to subscribe in full for the \$12.7 million portion of the offering being made to them. BRST holds an 85% interest in Bamangwato Concessions Limited (BCL), the mining company that will operate Selebi-Pikwe, and the Botswana Government has received a 15% interest.

The capital cost of the mining project, including initial working capital, is now estimated at \$143 million, and the cost of the related infrastructure to be provided through the Botswana Government is estimated at approximately \$71 million. The Botswana Government has obtained loans for the infrastructure from the World Bank and from agencies of Canada, the United Kingdom, and the United States. A consortium of German private banks together with Kreditanstalt für Wiederaufbau (KFW), an instrumentality of the German Government, will provide loan finance for the mining project amounting to nearly \$69 million, and the Industrial Development Corporation of South Africa will lend the project \$18 million.

AMAX's investment in BRST is approximately \$5.7 million in equity and a subordinated loan of \$1.5 million, and it has guaranteed certain interim financing of BRST. This investment will be increased by \$10.0 million as a result of the forthcoming subscription offer, assuming full public subscription. In addition, AMAX and the AAC/Charter Group have agreed with the lenders and BRST that, to the extent BRST does not otherwise obtain the additional funds needed

to complete the project, they will provide such additional funds on an equal basis. On the basis of current estimates, AMAX, if called upon by BRST, will have to provide at least \$4.5 million of additional funds for this purpose. AMAX and the AAC/Charter Group have also made major guarantee commitments covering the \$32 million World Bank loan to Botswana (and of any increase thereof up to 20%) and 10% of the KFW loan to BCL. AMAX's guarantee could, depending on circumstances, cover a maximum of approximately \$18 million of such loans, and in instances where certain West German Government insurance coverage is not applicable, an additional \$12 million of such loans.

Production is expected to start by early 1974, at a rate, in the initial years, of about 17,000 metric tons of refined nickel, 15,500 metric tons of refined copper, and 127,500 metric tons of sulfur.

Under a refining agreement between AMAX and BCL, AMAX expects to refine the nickel-copper matte produced at the Pikwe smelter at AMAX's nickel refinery at Braithwaite, Louisiana. A West German metals firm, Metallgesellschaft A.G., will purchase most of the copper production and approximately 55% of the nickel for sale in West Germany, AMAX has agreed to purchase from Metallgesellschaft for resale in West Germany up to one-half the nickel so purchased by Metallgesellschaft. A subsidiary of AMAX, acting as BCL's agent, will market the balance of the metal production in West Germany, unless more favorable terms are obtainable elsewhere. The sulfur byproduct from the smelting operation will be sold in southern Africa.

Litigation: In January, 1972, a shareholder of BRST commenced a derivative suit against AMAX, BRST, BRST's directors, and others, alleging, among other things, that the reorganization of BRST and the proposed subscription offer to its shareholders are unfair to the public holders, and dilute their interests in BRST for a grossly inadequate consideration. The plaintiff also alleges that BRST has violated the United States securities laws and that the circular and other materials provided to shareholders for a General Meeting at which the BRST reorganization was approved were false and misleading in a number of respects. The complaint demands injunctive relief and compensatory and punitive damages. AMAX considers these allegations unfounded and has filed an answer denying them. The plaintiff is not pressing his motion for preliminary relief.

#### **AMAX FINANCIAL REVIEW**

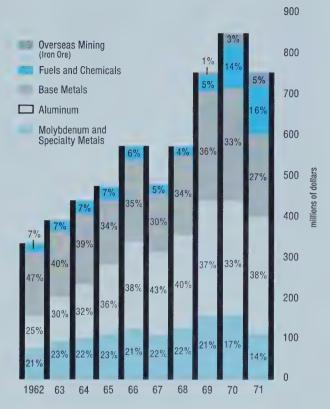
Net sales were \$756,920,000 in 1971 as compared with record high sales of \$840,720,000 in 1970. The reduction of \$83,800,000 was caused by lower prices and shipments for many of the Company's products resulting from the general reduction in industrial activity in the United States and abroad and oversupply of basic raw materials. In addition, sales were also reduced by industrywide strikes in the copper and coal industries. Shipments of iron ore in 1971, however, increased substantially over 1970.

Net earnings were \$55,410,000 before extraordinary charges and \$51,600,000 after such charges compared with record net earnings of \$83,600,000 in 1970. A provision for extraordinary charges totaling \$3.810,000 was made in 1971 for the writedown of certain facilities, including the Vicksburg, Mississippi potassium nitrate plant, which is being closed. There were no extraordinary charges in 1970, Primary earnings per common share in 1971 amounted to \$2.20 before and \$2.04 after extraordinary charges, compared with the record \$3.40 in 1970. Fully diluted earnings (showing the dilution that would have occurred if all outstanding convertible preferred stock had been converted into common stock and all outstanding common stock options had been exercised) in 1971 were \$2.16 before and \$2.01 after extraordinary charges compared with \$3.26 in 1970.

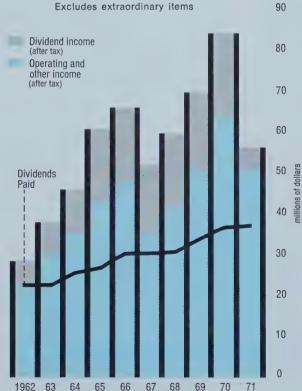
Earnings from operations before income taxes in 1971 decreased 25% to \$59,470,000 from \$78,980,-000 in 1970. Reduced profitability of molybdenum. base metals, and aluminum operations were only partially offset by increased earnings from iron ore and coal. Molybdenum shipments and earnings decreased substantially as lower production of alloy steels in the United States and abroad limited demand and oversupply increased competitive pressures. Lower prices prevailed for copper and lead. Copper earnings were also adversely affected by the five-week industrywide strike in July and August. Aluminum earnings were down, reflecting weak prices, but relatively less than for the major aluminum producers. Iron ore earnings increased sharply in proportion to higher shipments as the Mt. Newman Project continued to expand during 1971. Coal earnings increased despite the sixweek industrywide strike in October and November, which held production below the prior year.

**Dividend Income**, before United States income taxes, decreased to \$5,500,000 in 1971 from









\$22,550,000 in 1970. Most of this decrease was attributable to the receipt in 1970 of the final two dividends totaling \$12,630,000 from Roan Selection Trust Limited applicable to its copper mining operations in Zambia now held by Roan Consolidated Mines Limited (RCM). RST International, Inc. owns 20% of RCM and dividends received from RCM are now included in its earnings discussed below. Dividends from Tsumeb Corporation Limited and O'okiep Copper Company Limited decreased to \$4,550,000 from \$9,510,000 in 1970.

Interest expense, net of income on investments and before income taxes, increased to \$11,930,000 in 1971 from \$7,570,000 in 1970 due to the higher debt outstanding. Interest expense in 1971 is net of \$3,830,000 capitalized as attributable to construction in progress on major projects, which is discussed on page 32.

Earnings of RST International, Inc. (see pages 25-28 for discussion of Company's activities) after United States and foreign income taxes were \$12,810,000 in 1971 compared with \$11,550,000 in 1970. Earnings in 1971 included four dividends totaling \$6,-320,000 before United States income taxes received from Roan Consolidated Mines Limited, while 1970 earnings included only one quarterly dividend amounting to \$4,250,000. As mentioned above, AMAX's 1970 income included, in addition to the single RCM dividend, the final two dividends from Roan Selection Trust Limited amounting to \$12,630,000 before United States income taxes. The remainder of RST International's earnings came from fees paid by RCM for management and sales services, other commissions, metal trading income by the Ametalco group, interest income, and foreign currency gains (see RST International, Inc., Statement of Earnings on page 27).

#### **AMAX Sales and Earnings**

for 1971 and 1970 by source are as follows:

	Sa	les		nings taxes*
	1971	1970	1971	1970
Molybdenum and				
Specialty Metals	14%	17%	27%	37%
Aluminum	38	33	10	11
Base Metals**	27	33	8	8
Fuels and Chemicals	16	14	14	9
Iron Ore	5	3	23	10
Dividends and				
earnings after taxes				
of RST Int'l., Inc	_		18	25
	100%	100%	100%	100%

<sup>\*</sup>Before exploration expense, unallocated corporate charges, interest, taxes on income, and extraordinary charges.

**Dividends** declared by AMAX in 1971 totaled \$3,390,000 on preferred shares and \$33,140,000 on common shares, compared with \$3,150,000 on preferred shares and \$33,130,000 on common shares in 1970. In accordance with the terms of the preferred shares, the quarterly dividend per share was increased from \$1.00 to \$1.3125, effective December 1, 1971. The quarterly dividend on common shares was 35¢ per share in both years.

Cash and short-term investments increased by \$42,150,000, reflecting the excess of new long-term borrowings over capital expenditures and other uses of funds. Details of sources and uses of funds are shown on page 35.

Accounts receivable, less allowance for doubtful accounts, increased by \$12,660,000 to \$127,870,000 while sales decreased by \$83,800,000, due primarily to lower sales in operations having shorter payment terms and increased sales in operations having longer payment terms.

**Inventories** increased by \$17,590,000 to \$159,190,-000 due principally to increased molybdenum inventories.

AMAX investment in RST International, Inc. increased by \$12,810,000, which represents RST's earnings for 1971, to \$135,140,000. AMAX is accounting for its investment in RST on an equity basis. Accordingly, earnings are added to the investment account and at such times as dividends are paid to AMAX by RST International the investment account will be correspondingly reduced.

Net assets of RST on December 31, 1971 amounted to \$193,870,000, or \$58,730,000 in excess of the amount in the investment account (see RST International, Inc. Statement of Financial Position on page 27). It should be noted, however, that such net assets include investments in Zimco bonds and RCM shares and other securities carried at amounts \$22,380,000 greater than market quotations at yearend and net assets of \$10,320,000 which currently cannot be withdrawn from Rhodesia.

Investments in other companies in which AMAX holds minority interests totaled \$31,980,000 at the end of 1971, compared to \$29,800,000 at the end of 1970. These investments are carried at cost as shown in the table on page 31. Changes in investments during the year included the purchase of common shares and options of Australian Consolidated Minerals N.L., an Australian exploration company, advances to subsidiaries of Botswana RST Limited, and the purchase of additional common shares of Canada Tungsten Mining Corporation, Limited. The market value of listed securities approximated cost based on year-end quotations.

<sup>\*</sup>Includes transactions involving the purchase and sale of metals, the sale of metals processed from concentrates and scrap materials, and tolling services.

#### **DIVIDENDS FROM AMAX INVESTMENTS IN OTHER COMPANIES**

	(IN THOUSANDS)	
In Africa	1971	1970
Roan Selection Trust Limited	_	\$12,630
Tsumeb Corporation Limited	3,580	7,110
O'okiep Copper Company Limited	970	2,400
Miscellaneous	950	410
Total before U.S. tax	\$5,500	\$22,550

#### **AMAX INVESTMENTS IN OTHER COMPANIES**

on December 31, 1971

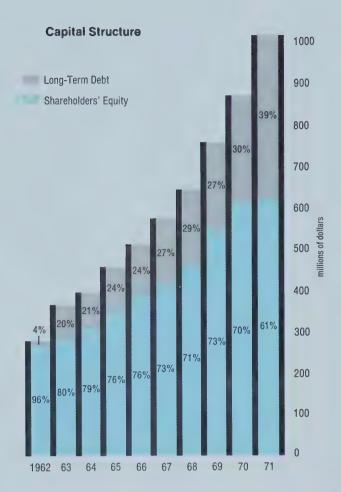
	Number of Shares	AMAX Equity	Cost	Market Value <sup>(1)</sup>	
Listed securities:					
Botswana RST Limited(2)	952,149	30%	\$ 3,460	\$ 2,980	
Canada Tungsten Mining					
Corporation, Limited	2,029,100	41	1,740	3,250	
Copper Range Company(3).	463,356	20	10,580	8,920	
Kawecki Berylco					
Industries, Inc	191,427	6	6,100	2,130	
North Kalgurli (1912) Ltd	2,179,948	10	4,400	1,110	
O'okiep Copper					
Company Limited	176,369	17	440	9,740	
Other	_	_	1,740	860	
			28,460	\$28,990	

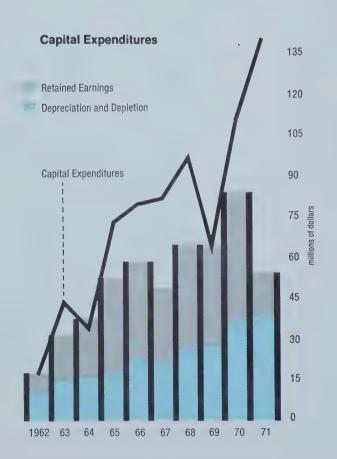
(IN THOUSANDS)

#### **Unlisted securities:**

Tsumeb Corporation			
Limited <sup>(4)</sup>	1,167,250	29	840
Minera Frisco, S.A	154,593	18	530
Other	_	_	2,150
			\$31,980

- (1) AMAX makes no representation that these values, which represent the closing quotations on December 31, 1971, could have been realized in the event of a sale of these holdings. The estimated total market value of unlisted securities is substantially in excess of cost.
- (2) Does not include 403,023 shares (cost: \$1,221,000, market value: \$1,491,000) held by RST International, Inc., a wholly owned unconsolidated subsidiary. Book value includes advances to subsidiaries of Botswana RST Limited.
- (3) 462,556 of these shares have been deposited as security pursuant to a court order requiring AMAX to deposit cash or marketable securities in the amount of not less than \$10,000,000.
- (4) While there was no quoted market price for Tsumeb Corporation shares, that corporation's earnings for its financial year ended June 30, 1971 of \$13,880,000 (\$3.47 per share) indicate that AMAX's holdings in Tsumeb have a value substantially in excess of cost of 72¢ per share.





Investments in AMAX Credit Corporation and in 50%-owned companies were \$18,170,000 at year-end, up from \$17,390,000 at the end of 1970.

Long-term debt at year-end was \$392,040,000, an increase of \$130,550,000 during the year. In view of substantial requirements for planned capital expenditures, AMAX in March, 1971 sold domestically \$50,000,000 principal amount of 81/2 % 25year sinking fund debentures and \$50,000,000 principal amount of 71/2 % seven-year notes. In addition, in order to comply with requirements of the Office of Foreign Direct Investment with respect to our overseas operations and investments, \$32,000,000 principal amount of 834 % 15-year sinking fund debentures, and \$18,000,000 principal amount of 8% five-year notes were sold in the Eurodollar market in March and April, 1971, A summary of long-term debt appears on page 37 (Note 9).

Proceeds from sale of future production represent the cash received from the sale of future coal production. In March, 1971, agreements were executed totaling \$60,000,000 for the sale of future coal production to finance the development of three coal mines. Repayment is to be made from the production of these three mines. In November, 1971, one of the mines commenced production.

In 1971, \$25,400,000 was received under these agreements and the balance remaining to be repaid at year-end was \$25,360,000.

**Shareholders' equity** amounted to \$625,160,000 at year-end 1971, an increase of \$15,410,000 during the year. Retained earnings for the year accounted for \$15,070,000 of this increase.

Capital stock issued at the end of 1971 consisted of 23,697,374 common shares (including 17,089 treasury shares) and 786,868 shares of Series A Convertible Preferred shares, essentially the same as at the end of 1970. During the year, 8,825 common shares were newly issued upon exercise of options under the Company's Stock Option Plans for Key Employees. There were 31,449 holders of common and 922 holders of preferred shares of record on December 31, 1971.

Foreign net assets, excluding investments in RST International, Inc., and other companies as shown on page 31, amounted to \$142,000,000 at the end of 1971 compared to \$124,000,000 a year earlier. Approximately 54% of this investment is located in Australia, 24% in Western Europe, and 15% in Canada. The principal increase was in the Mt. Newman Iron Ore Project in Australia.

Capital expenditures for property, plant and equipment totaled \$139,450,000 in 1971, compared with \$110,200,000 in 1970, exclusive of the cost in 1970 of acquiring the outstanding 58% interest in Roan Selection Trust Limited. Major expenditures in 1971 included continued development of the Henderson Mine, expansion of coal production capacity and of the Mt. Newman Iron Ore Project, and the purchase of potash reserves in Canada. Construction in progress increased to \$144,560,000 at year-end in 1971 from \$94,300,000 at year-end in 1970.

Capitalized interest expense: It was formerly the Company's policy to capitalize interest during construction only on those projects for which specific project borrowings had been made. Effective October 1, 1971, the capitalization of interest applicable to major construction projects was extended to include interest on general corporate borrowings as well as specific project borrowings. In 1971, capitalized interest expense after taxes totaled \$1,990,000, including \$1,380,000, or 6¢ per share, attributable to the change in accounting policy. If the change in accounting policy had been in effect for the entire year, 1971 net earnings would have been increased by an additional \$3,300,000, or 14¢ per share.

H. A. Sawyer, Jr. Vice President—Finance

AMAX Financial team reviews new reporting regulations.



## CONSOLIDATED STATEMENT OF CURRENT AND RETAINED EARNINGS

for the Years Ended December 31, 1971 and 1970

	1971	1970
Net sales	\$756,920,000	\$840,720,000
Cost of sales, exclusive of items shown separately  Depreciation and depletion (Note 8)  Selling and general expenses	587,510,000 38,440,000 55,020,000	654,320,000 36,150,000 55,510,000
Taxes other than Federal and foreign income taxes	16,480,000	15,760,000
Total costs applicable to sales	697,450,000	761,740,000
Earnings from operations  Dividend income (page 30)  Interest expense, net (Note 2)	59,470,000 5,500,000 (11,930,000)	78,980,000 22,550,000 (7,570,000)
Earnings before Federal and foreign income taxes, earnings of RST International, Inc., and extraordinary charges Federal and foreign income taxes (deferred 1971, \$13,840,000;	53,040,000	93,960,000
1970, \$8,180,000) (Note 4)	10,440,000	21,910,000
Earnings of RST International, Inc. after applicable	42,600,000	72,050,000
income taxes (1971, \$6,230,000; 1970, \$8,750,000)	12,810,000	11,550,000
Earnings before extraordinary charges  Extraordinary charges (after applicable deferred Federal	55,410,000	83,600,000
income tax of \$3,640,000) (Note 5).,	(3,810,000)	
NET EARNINGS	51,600,000	83,600,000
Deduct dividends declared for the year Preferred stock	3,390,000 33,140,000	3,150,000 33,130,000
Amount added to retained earnings for the year	15,070,000 408,380,000	47,320,000 361,060,000
Retained earnings December 31	\$423,450,000	\$408,380,000
Per common share: Primary earnings (A) Earnings before extraordinary charges	\$2.20	\$3.40
Extraordinary charges	(.16)	
Net earnings	\$2.04	\$3.40 =====
Fully diluted earnings (A)  Earnings before extraordinary charges  Extraordinary charges	\$2.16 (.15)	\$3.26 
Net earnings	\$2.01	\$3.26
Dividends declared	\$1.40	\$1.40

<sup>(</sup>A) Primary earnings per share are based on the average number of AMAX shares outstanding and assume the exercise of all stock options issued after June 1, 1969. Fully diluted earnings per share assume the conversion of the outstanding Convertible Preferred Stock as well as the exercise of all stock options. The warrants issued in 1970 in connection with the reorganization of Roan Selection Trust Limited had no effect on the earnings-per-share data, as the exercise price was in excess of the market price of the common stock.

The notes on pages 36-39 are an integral part of these financial statements.

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

December 31, 1971 and 1970

ASSETS	1971	1970
Current assets		
Cash	\$ 19,570,000	\$ 18,300,000
Time deposits and certificates of deposit	85,250,000	10,150,000
Marketable securities, at cost (approximates market)		
(Note 6)	35,020,000	69,240,000
( · · - · - · · )	139,840,000	97,690,000
Accounts receivable, less allowance for doubtful accounts		. ,
(1971, \$4,320,000; 1970, \$3,590,000)	127,870,000	115,210,000
Inventories (Note 7)	159,190,000	141,600,000
Prepaid expenses and other current assets	9,120,000	8,330,000
Total current assets	436,020,000	362,830,000
Long-term receivables, loans, deferred debt discount		
and charges	37,840,000	35,260,000
Investment in RST International, Inc. (Note 1)	135,140,000	122,330,000
Investments in other companies (page 31 and Note 6)	31,980,000	29,800,000
Investments in AMAX Credit Corporation and		
50%-owned companies (Note 1)	18,170,000	17,390,000
Property, plant and equipment, at cost, less		
accumulated depreciation and depletion (Note 8)	594,100,000	499,160,000
TOTAL	\$1,253,250,000	\$1,066,770,000
LIABILITIES, DEFERRED CREDITS, AND		
SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued liabilities	\$ 93,730,000	\$ 88,030,000
Notes payable	25,700,000	20,710,000
Federal and foreign income taxes	5,960,000	11,580,000
Unearned treatment charges, etc.	8,200,000	9,480,000
Total current liabilities	133,590,000	129,800,000
	100,000,000	120,000,000
Notes and debentures payable (Note 9)	392,040,000	261,490,000
Deferred income taxes, reserves, etc. (Note 10)	77,100,000	65,730,000
Proceeds from sale of future production	25,360,000	-
•	628,090,000	457,020,000
Shareholders' equity (Notes 11/13)		
Preferred stock	790,000	700.000
Common stock	23,700,000	790,000 23,690,000
Paid in capital	177,750,000	177,500,000
Retained earnings	423,450,000	408,380,000
Cost of treasury stock	423,430,000	
	(530,000)	(610,000)
	(530,000)	(610,000)
Total shareholders' equity	(530,000) 625,160,000 \$1,253,250,000	(610,000) 609,750,000 \$1,066,770,000

The notes on pages 36-39 are an integral part of these financial statements.

# CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

for the Years Ended December 31, 1971 and 1970

	1971	1970
Sources of Funds		
Earnings before extraordinary charges	\$ 55,410,000	\$ 83,600,000
Extraordinary charges (after applicable deferred Federal income tax)	(3,810,000)	_
Depreciation and depletion	38,440,000	36,150,000
Deferred Federal income tax (net of applicable tax on		20,100,000
extraordinary charges)	10,200,000	8,180,000
Undistributed earnings of RST International, Inc.,		
AMAX Credit Corporation and 50%-owned companies	(13,690,000)	(12,400,000)
Funds from operations	86,550,000	115,530,000
		, ,
Disposals of property, plant and equipment	6,080,000	14,360,000
Disposals of investments in other companies	300,000	5,010,000
Issuance of long-term debt securities	156,890,000	82,770,000
Increase in current notes payable	4,990,000	8,120,000
Proceeds from sale of future production	25,360,000	
Total sources of funds	280,170,000	225,790,000
Uses of Funds		
Property, plant and equipment additions	\$139,450,000	\$110,200,000
Increase in investment in RST International, Inc	_	82,670,000
Increase in investments in other companies	2,380,000	4,270,000
Dividends on common and preferred stock	36,530,000	36,280,000
Redemption and repayment of long-term debt	26,340,000	22,490,000
Increase (decrease) in accounts receivable	12,660,000	(11,180,000)
Increase in inventories	17,590,000	14,010,000
Decrease in accounts payable and other accruals	1,200,000	9,050,000
Other decreases (increases)	1,870,000	(710,000)
Total funds used	238,020,000	267,080,000
INCREASE (DECREASE) IN FUNDS	42,150,000	(41,290,000)
Cash and equivalent January 1	97,690,000	138,980,000
CASH AND EQUIVALENT DECEMBER 31	\$139,840,000	\$ 97,690,000

The notes on pages 36-39 are an integral part of these financial statements.

## NOTES TO FINANCIAL STATEMENTS

#### 1. Financial Statements Presentation:

The consolidated financial statements include the accounts of all subsidiaries in which a voting control of 51% or more is owned except AMAX Credit Corporation, a wholly owned finance subsidiary, and RST International, Inc. They also include AMAX's portion of AMAX-Homestake Lead Tollers, a 50% partnership.

The Company's investment in AMAX Credit Corporation and 50%-owned companies is carried at its equity in the net assets of these companies.

Under a plan of reorganization approved by Roan Selection Trust Limited (RST) shareholders on August 6, 1970, and by the High Court of Zambia on August 14, 1970, all RST shares other than the 42.3% owned by AMAX were cancelled on August 15, 1970, in exchange for the distribution to non-AMAX shareholders of certain assets of RST and \$76,170,000 principal amount of AMAX subordinated debentures with 761,666 common stock warrants attached, resulting in effect in the acquisition by AMAX of the remaining 57.7% interest in RST, which has been reorganized as RST International, Inc. (see litigation, page 27). RST's former operating mines are now owned by Roan Consolidated Mines Limited in which a Zambian state corporation has a 51% interest and in which RST International, Inc. holds a 20% interest. For accounting purposes the reorganization was effective from January 1, 1970, and the accounts have been reported on this basis. AMAX's investment is being carried at the cost of the 42.3% to which has been added the AMAX debentures issued with warrants attached and certain taxes and other costs incurred in connection with the reorganization. The investment has been increased by the undistributed earnings of RST International, Inc. since January 1, 1970.

#### 2. Interest Expense:

Interest expense, before income taxes, totaled \$25,930,000 in 1971 and \$19,540,000 in 1970. Interest income and profit on investments, before

income taxes, totaled \$14,000,000 in 1971 and \$11,970,000 in 1970.

It had been the Company's policy to capitalize interest during construction only on those projects for which specific project borrowings had been made. Effective October 1, 1971, the capitalization of interest applicable to major construction projects was extended to include interest on general corporate borrowings, as well as specific project borrowings. In 1971, capitalized interest expense after taxes totaled \$1,990,000, including \$1,380,000, or 6¢ per share, attributable to the change in accounting policy. If the change in accounting policy had been in effect for the entire year, 1971 net earnings would have been increased by an additional \$3,300,000. or 14¢ per share. No interest was capitalized in 1970.

#### 3. Exploration and General Research:

Exploration and general research expenditures amounted to \$23,630,000 and \$16,890,000 in 1971 and 1970, respectively. In accordance with the Company's established policy, the charge to cost of sales for exploration and general research is reduced by expenditures previously charged off on properties that currently become exploitable. In 1971, exploration and general research expenses were \$22,170,000 after capitalizing amounts expensed in prior years. There were no items capitalized in 1970.

#### 4. Investment Tax Credit:

The investment tax credit is being accounted for as a reduction of Federal income taxes in the year in which the credit is earned. The credit amounted to \$1,860,000 in 1971, and \$280,000 in 1970.

#### 5. Extraordinary Charges:

Extraordinary charges of \$3,810,000 in 1971 provided for the write-down of certain facilities, including the Vicksburg, Mississippi potassium nitrate plant which is being closed.

## 6. Marketable Securities and Investments in Other Companies:

At December 31, 1971, marketable securities with a cost of \$3,050,000, and 462,556 shares of Copper Range Company costing \$10,560,000 have been deposited as security pursuant to a court order in connection with RST litigation, requiring AMAX to deposit cash or marketable securities in the amount of not less than \$10,000,000.

7. Inventories:  Metals refined and in process at the lower of cost (primarily last-in, first-out) or market (at December 31 market quotations: 1971, \$130,000,000; 1970, \$113,510,000)  Metal fabricated products, etc., at the lower of cost (primarily first-in, first-out) or market  Ores, concentrates and chemicals, at the lower of average cost (primarily) or market  Operating supplies, at average cost, less reserves	\$ 66,280,000 47,340,000 25,840,000 19,730,000 \$159,190,000	\$ 57,570,000 52,950,000 13,710,000 17,370,000 \$141,600,000
8. Property, Plant, and Equipment:	1971	1970
Mining properties and milling plants	\$434,620,000	\$368,090,000
Smelters and refineries	174,350,000	173,670,000
Metal fabricating plants	101,350,000	92,870,000
Oil and gas properties	11,460,000	9,710,000
Chemical plant	10,970,000	10,350,000
Miscellaneous property and equipment	29,940,000	29,220,000
Construction in progress	144,560,000	94,300,000
Total cost	907,250,000	778,210,000
Less accumulated depreciation and depletion	313,150,000	279,050,000
Net book value	\$594,100,000	\$499,160,000
Charged to operations for the year:		
Depreciation	\$ 31,090,000	\$ 30,560,000
Depletion	7,350,000	5,590,000
	\$ 38,440,000	\$ 36,150,000

Depreciation and depletion are computed primarily on the straight-line and unit of production methods, respectively.

9. Long-Term Debt Excluding Current Maturities:	1971	1970
Senior Debt:		
8½% sinking fund debentures payable 1978 to 1996	\$ 50,000,000	\$ -
7½ % notes payable 1978	50,000,000	-
8¾ % sinking fund debentures payable 1974 to 1986	32,000,000	_
8% notes payable 1976	18,000,000	
4½ % notes payable 1972 to 1988	48,000,000	51,000,000
4.85% notes payable 1972 to 1986	21,250,000	22,340,000
6¼% sinking fund debenture payable 1973 to 1982	22,800,000	22,800,000
Other notes, 5% to 61/4%, payable 1972 to 1976	10,170,000	16,970,000
Total	252,220,000	113,110,000
Consolidated Subsidiaries (not guaranteed):		
6% to 7% notes payable 1972 to 1975 (A)	23,900,000	32,200,000
5% % notes payable 1972 to 1987 (A) (B)	19,190,000	20,070,000
6% notes payable 1972 to 1974 (A) (B)	5,130,000	7,480,000
Other notes, 4¾ % to 8¼ %, payable 1972 to 1985	15,430,000	12,460,000
Total	63,650,000	72,210,000
Subordinated Debt:		
8% sinking fund debentures payable 1981 to 1986	76,170,000	76,170,000
Total long-term debt	\$392,040,000	\$261,490,000
(A) Secured by properties.		
(B) AMAX has a contract to purchase certain tolling services, and the proceeds from this contract	are used to set	vice this debt.
The 1971 long-term debt is payable as follows:	1973	\$ 23,420,000
	1974	27,460,000
	1975	20,550,000
	1976	29,700,000
	1977	13,230,000
	1978-1996	277,680,000
		\$392,040,000

#### **TEN-YEAR SUMMARY**

		1971	1970	1969
For the Year (in millions except per share figures)	Net sales of products and services  Net sales by agency businesses(1)  Total net sales	\$756.9 \$756.9 \$ 60.3(2)(11) 5.5 (10.4) \$ 55.4(3)(11)	\$840.7 <u></u>	\$753.5 \$753.5 \$ 74.3 22.2 (27.4) \$ 69.1
	Dividends declared: On preferred stock On common stock  Total  Per share of common stock  Primary earnings  Fully diluted earnings  Dividends	\$ 3.4 33.1 \$ 36.5 \$ 2.20(3)(11) 2.16(3)(11) 1.40	\$ 3.2 33.1 \$ 36.3 \$ 3.40 3.26 1.40	\$ 1.2 31.3 \$ 32.5 \$ 2.92 2.86 1.33
	Capital expenditures	\$139.5 38.4	\$110.2 <sup>(8)</sup> 36.2	\$ 63.0 <sup>(9)</sup> 27.2
At Year-End (in millions)	Working capital Investments (at book amounts): In RST International, Inc In Africa Other Property, plant and equipment (net) Long-term debt Other liabilities less other assets Shareholders' equity	\$302.4 135.1 <sup>(10)</sup> 5.3 44.9 594.1 (392.0) ( 64.6) \$625.2	\$233.0 122.3 <sup>(10)</sup> 4.7 42.5 499.2 (261.5) (30.5) \$609.7	\$274.5 28.1 4.7 42.4 439.5 (201.2) (34.9) \$553.1

<sup>(1)</sup> The agency businesses were sold to Roan Selection Trust Limited as of December 31, 1963.

<sup>(2)</sup> Includes earnings of RST International, Inc. which in turn includes dividends received from Roan Consolidated Mines—1971, \$6.4 million; 1970, \$4.3 million.

<sup>(3)</sup> Excludes extraordinary charge of \$3,810,000, 16¢ and 15¢ per share, respectively. See note 5, page 36.

<sup>(4)</sup> Excludes extraordinary items: gain of \$13,540,000, 59¢ per share, on sale of interest in Palabora Mining Company, less loss of \$5,960,000, 26¢ per share, on write-off of molybdenum oxide plant.

<sup>(5)</sup> Excludes nonrecurring gain on sale of oil properties: \$3,510,000 or 15¢ per share.

<sup>(6)</sup> Excludes nonrecurring gain of \$3,000,000 or 14¢ per share, on sale of sales agency businesses, credited to surplus in 1963.

\$570.6	\$478.3	\$572.6	\$475.0	\$438.2	\$381.9	\$327.2
					325.0	315.0
\$570.6	\$478.3	\$572.6	\$475.0	\$438.2	\$706.9	\$642.2
\$ 57.4	\$ 46.4	\$ 62.0	\$ 58.9	\$ 45.3	\$ 42.9	\$ 34.6
20.1	19.0	20.9	20.8	11.7	10.5	8.1
(17.7)	(12.6)	(17.3)	(19.6)	(11.4)	(15.6)	(14.6)
\$ 59.8 <sup>(4)</sup>	\$ 52.8 <sup>(5)</sup>	\$ 65.6 =====	\$ 60.1	\$ 45.6	\$ 37.8(6)	\$ 28.1
\$ 0.4	\$ 0.9	\$ 1.4	\$ 1.8	\$ 1.8	\$ 1.8	\$ 1.8
29.4	28.6	28.1	24.3	23.1	20.1	20.0
\$ 29.8	\$ 29.5	\$ 29.5	\$ 26.1	\$ 24.9	\$ 21.9	\$ 21.8
\$ 2.56(4)	\$ 2.31(5)	\$ 2.90	\$ 2.67	\$ 2.02	\$ 1.67(6)	\$ 1.23
2.50(4)	2.24(5)	2.79	2.57	1.95	1.61(6)	1.22
1.27	1.27	1.27	1.12	1.07	.93	.93
\$101.2	\$ 80.9	\$ 78.4	\$ 71.4	\$ 32.5	\$ 43.3	\$ 17.3
25.9	21.0	22.2	17.5	16.0	14.7	11.4
\$265.2	\$238.9	\$216.9	\$211.0	\$188.2	\$175.1	\$130.2
28.1	28.8	29.7	30.7	30.7	30.7	23.1
4.7	2.6	4.2	5.1	4.8	3.6	2.4
31.8	33.7	25.7	20.6	23.6	22.5	21.5
328.7	278.1	249.2	198.1	151.2	132.3	105.6
(189.9)	(156.9)	(125.5)	(108.0)	(81.4)	(72.9)	(10.0)
(13.4)	(9.1)	(12.3)	(7.5)	(3.2)	(0.3)	(3.6)
\$455.2 =====	\$416.1	\$387.9	\$350.0	\$313.9	\$291.0	\$269.2

<sup>(7)</sup> The net earnings and dividends per share of common stock have been adjusted to give effect to the 3-for-2 common stock split in 1969.

<sup>(8)</sup> Excludes \$82.7 million cost of additional investment in RST International, Inc.

<sup>(9)</sup> Excludes \$76.2 million of fixed assets acquired in the purchase of Ayrshire Collieries Corporation.

<sup>(10)</sup> Represents cost of 100% interest in RST International, Inc. plus undistributed earnings of RST International (see page 30); amounts prior to 1970 represent AMAX's investment in and advances to Roan Selection Trust Limited previously included in investments in Africa.

<sup>(11)</sup> See Footnote 2, page 36, for effect of change in policy with respect to capitalization of interest, which increased net earnings by \$1,380,000, or 6¢ per share.



1270 AVENUE OF THE AMERICAS • NEW YORK, N.Y. 10020

